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Ontario Ministry of Labour

Ontario Manpower Commission

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# LABOUR MARKET INFORMATION AND ANALYSIS

EMPLOYMENT AND THE PHYSICALLY
HANDICAPPED IN ONTARIO

A publication of

## The Ontario Manpower Commission





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### EMPLOYMENT AND THE PHYSICALLY HANDICAPPED IN ONTARIO

ONTARIO MANPOWER COMMISSION

SECRETARIAT

JANUARY, 1982.



#### PROLOGUE

Physical impairment may be observed to extend along a continuum ranging from impairment (without limitation) to impairment with functional limitation i.e. disability.\*

The data contained in this report was derived from The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario, a study prepared for the Ontario Ministry of Health. Respondents providing information universally manifest physical impairment with an accompanying degree of functional limitation.

Persons experiencing physical impairments not interferring in the course of daily activity (i.e. the impaired/not handicapped) were not sampled beyond the process of determining a rudimentary demographic profile. The size of the "impaired/not handicapped" population, and the age characteristics of its constituents, is presented in Appendix II, Table 1 — as is the size of Ontario's physically handicapped community.

5.4% of Ontario's population is physically handicapped. Another 4.5% experience impairment without disability. 4.7% and 3.9%, respectively, of the working age population are similarly affected. Due to a loose definition of impairment, statistics pertaining to this group should be approached with caution. In any event, in keeping with Provincial policy to provide services to those most in need, this paper focusses on the characteristics and identified employment-related needs of Ontario's physically handicapped population.

\*Disability:

is defined in terms of the effects of conditions or impairments on an individual's ability to perform normal daily activities ('over the long term'). It is used to describe the loss or reduction of functional ability and activity that is consequent upon impairment.

Impairment:

describes any disturbance of or interference with the normal structure and function of the body.

World Health Organization

#### NOTE:

The Statistics reported in this paper were derived from the original data tape compiled as a product of a study commissioned by the Ministry of Health. Subsequent to the analyses herein presented, an audit -- resulting in minor modifications to the data was performed. Consequently, certain of the percentages reported in this document may have shifted slightly. Trends, however, are expected to remain constant.



#### EXECUTIVE SUMMARY

An investigation of the general dimensions of employment within Ontario's handicapped community has determined that:

- o The handicapped labour force consists of 160,544 persons. (The working-age population numbers 257,971).
- o Although participation rates for disabled and non-disabled populations do not differ appreciably (62.2% vs. 66.8%), levels of unemployment do. In 1980, the larger labour force experienced an unemplopment rate of 6.9% while the disabled recorded a rate of 29.7%.

The finding that aggregate participation rates associated with the physically disabled and the non-disabled are similar indicates that comparable proportions of persons in both groups voluntarily opt out of labour force activity.

In contrast to the larger labour force it is evident that handicapped workers in all occupational sectors face greater prospects of unemployment. Still, within the physically disabled labour force, a substantial number of people (70.3%) are employed. In answer to the question: 'what factors distinguish the employed disabled from the unemployed disabled?', it was found that:

- o Youth and sex (female) negatively influence employment status;
  - o The employed were more likely to have pursued their education further than the unemployed;
  - o The employed were less likely to have discontinued their education for health-related reasons;
  - o Community type (urban or rural) did not influence employment status;
  - o The absence of previous work experience was not widespread among the unemployed (only 6.4% lack such experience) -- making this a significant factor to very few (3,100 persons).

Duration of unemployment statistics suggest the presence of severe unemployment. Eighty percent of unemployed disabled workers have been jobless for upward of 26 weeks. This is twice the average length of time spent without a job in the larger labour force. Extended unemployment may be reflective of:

- o persistent barriers;
- o the economic climate;
- o age;
- o the actual employment potential of an individual;
- o actual interest in securing employment.



Labour force performance patterns were observed to differ by disability group. Indeed, disparate levels of unemployment suggest the presence of varied job-related needs.

As previously noted, the highest level of unemployment within the entire handicapped labour force is experienced by the youth group yet only three disability groups find more than fifteen percent of their constituents in this age category (respiratory -- 19.2%, sight impaired -- 18.6%, and neurological 16.6%). For four groups, five percent or less of constituents are drawn from this age class (cardiovascular -- 1.2%, neoplasm -- 1.9%, endo-meta-nutr. -- 3.8%, musculoskeletal -- 5.5%). In contrast to the 25-44 year age group, persons between 45 and 65 experienced a higher unemployment rate. With respect to each disability group often substantially greater than 48.0% of individuals fall into the older class. Having observed the statistics on previous work experience, it would be reasonable to assume that most of these individuals have exhibited a prior labour force attachment.

A disaggregation of the older group further reveals that, for six groups, over forty percent of constituents fall between 55-65 years. These groups are: neoplasm (64.8%), cardiovascular (64.4%), sight impaired (50.4%), hearing impaired (45.3%), endo-meta-nutr. (44.9%), and respiratory (41.0%).

With regard to part-time vs. full-time employment, two intervening variables preclude making the assumption that disability type acts on basis of employment. They are age and sex. Each of the disability groups cited in the preceeding paragraph are predominantly older. Earlier findings indicated that the incidence of part-time employment increases with age and is higher among women.

Two-thirds of the unemployed disabled expressed an interest in immediate employment. Interest in employment was keenest within the 15-24 year age group and declined steadily with increasing age. An exploration of interest by disability group reveals that:

(i) levels of interest varied; (ii) unemployment rates for certain groups (neoplasm and alimentary) may be overstated.

Slightly over 13,000 of the unemployed felt that job training could enable them to find employment. Almost two-thirds of the unemployed group declined the suggestion — the majority citing health problems as preventing them from pursuing training. Manual skills training was the preferred option while training in job seeking skills ranked a distant second. Level of interest in training roughly parallels level of interest in employment when age categories are examined.

Within the larger handicapped community, direct and indirect employmentrelated needs ranked low in the needs hierarchy. Their placement may be expected to rise if considered with respect to labour force participants only.



Positive employer attitudes and government support efforts were not widely credited with facilitating employment. Most employed persons expressed a reliance on their own skills and abilities.

A variety of factors -- economic, attitudinal, personal and disability specific, interact to affect:

- o available employment opportunities;
- o the ability of handicapped workers to take advantage of available opportunities;
- o the level of unemployment experienced by the physically handicapped.

While an economic upturn may result in increased job opportunities and lower levels of unemployment generally, certain segments of the disabled labour force (due to logistical barriers, inadequate preparation, or negative attitudes directed toward disability) will continue to face difficulty in gaining or maintaining employment.



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#### INTRODUCTION

The handicapped community is heterogeneous in nature consisting of those who are physically handicapped, developmentally handicapped and psychiatrically disabled. Due to the differing issues and concerns associated with these varied subgroups, it was decided to examine each separately. This is the paper on the physically disabled. It has been prepared by the Secretariat of the Ontario Manpower Commission and consists of three parts:

- PART I quantifies handicapped unemployment in Ontario as well as identifying characteristics of the unemployed disabled;
- PART II discusses factors contributing to handicapped unemployment;
- PART III engages in a projection of the employment situation over the next five years with regard to this group.

The Commission gratefully acknowledges the assistance provided by the Office of the Co-ordinator of Rehabilitation Services, and the Provincial Steering Committee on Employment and the Disabled which consists of representatives from the Ministries of: Health; Community and Social Services; Labour; the Secretariat for Social Development; and the Workmen's Compensation Board.



#### GENERAL DIMENSIONS OF THE HANDICAPPED POPULATION

Approximately five percent of Ontario's non-institutionalized population is physically disabled. This figure represents 456,000 persons.

A snapshot of the group reveals that it is an aging population -- greater than 80% of disabled persons are forty-one 'plus' years old. Approximately eleven percent fall between the ages of 20 and 40 while 7.2% are nineteen and under.

The group is predominantly female. Women constitute the majority (54.2%) of the handicapped population. The Ontario Ministry of Health attributes this to their greater longevity.

A review of other demographic variables reveals the following:

#### Education

Approximately 11% of disabled persons have pursued a post-secondary education. Twenty-one percent have completed secondary school (including technical-trade schools) while 67.0% possess less than a completed high school education. This may be due partially to the combined effects of:

- o young people currently moving through the educational system;
- o a pre-eminence of older persons educated during a time when less emphasis was placed on advanced education.

#### Marital Status

In Ontario, almost two-thirds of handicapped people are married. Sixteen percent have been widowed while 14% are, and have always been, single.

Half of all disabled persons identify themselves as heads of households. Another 32% registered spousal status while 10% are offspring in relation to their heads of households. Thus, 42% of disabled persons who are not themselves heads of households live within a traditional nuclear family arrangement.

Only 14% of the handicapped population live alone.

#### Income

Twenty percent of the handicapped exist without an identified personal income. Sixty-seven percent earn less than \$15,000 per annum while 11.2% earn between \$15-30,000 per year. When total family income is taken into consideration, the percentage of individuals with (combined) incomes of \$15,000 or less declines to 47.7%. Correspondingly the proportion with incomes of \$15-30,000 rises.<sup>3</sup>



#### Regional Distribution

Regional distribution of handicapped persons in Ontario parallels general population concentrations. The largest group is located in central Ontario followed by groups residing in the western region, the southern region, the eastern region and the north. Urban addresses may be associated with 68% of the handicapped community while the remainder live in rural locales.

#### 1.1 Disability Profile

Not all physical impairments are readily visible. Half of the handicapped population is disabled as a result of 'invisible' impairments.

Within the physically disabled community, several distinct subgroups emerge.

Ten aggregate categories of disability — each encompassing varied specific impairments or conditions — have been identified by the Ministry of Health. In order of prevelance these categories are:

- o <u>Musculo-skeletal</u> -- e.g. rheumatoid and degenerative arthritis, orthopaedic limbs, spina bifida, skin disorders, congenital anomalies;
- o <u>Cardiovascular/Arteriovascular</u> -- e.g. congenital and acquired disorders, hypertension;
- o Hearing Impairments;
- Neurological including impairments from epilepsy, CP, and polio to brain damage;
- o Respiratory -- e.g. cystic fibrosis, emphysema;
- o Alimentary -- e.g. digestive disorders, urogenitial;
- o <u>Endocrine/Metabolic/Nutritional</u> including conditions from diabetes to all gland diseases;
- o Sight Impairment -- total and partial impairments;
- o Neoplasm -- including all cancers;
- o Speech Impairment.



Etiology varies. Illness and hereditary factors have been cited as the leading causes of disability followed by work accident, environmental causes, birth defects and aging. Onset categories where men outnumber women are work accident, travel accident (72.3% vs. 27.7% and 56.7% vs. 43.6% respectively) and environmental causes (9.4% vs. 6.4%).

Various functional limitations may accompany disability. Sixty-four percent of handicapped Ontarians face two or more functional limitations. Age intervenes — older persons are more likely to possess several limitations.

Certain conditions aggregate to different age groups. Individuals 0-19 years most often have problems associated with musculoskeletal, hearing, speech and heart and lung impairments while those in the 40-64 age range most often experience problems with spin-trunk, multiple skeletal conditions, internal organs and peripheral vascular systems.

Also, certain limitations are more typical of one or the other sex. Musculoskeletal, multiple problems and internal organ problems exhibit a higher frequency of occurrence among females whereas hearing difficulties and heart-lung problems are more prevelant among males. 5



#### 1.2 SUMMARY

Highlights from the Ontario Ministry of Health disclose that:

- o 5% (456,000 persons) of Ontario's population experiences physical handicaps to the extent that disability interferes with the course of daily activity 6
- o 80% of disabled persons are over forty years of age. Correspondingly, illness and aging are leading causes of disability. Due to their greater longevity, women are in the majority.
- o 67% of handicapped persons report a <u>personal</u> income of less than \$15,000 per annum. Another 20% report no income at all.
- o Half of all disabled persons are heads of households while another 42%, as either spouses or progeny, live within a traditional nuclear family arrangement.
- o Most (67%) physically handicapped persons possess less than a completed secondary school education.
- o The handicapped community is, in itself, heterogeneous. Ten disability categories emerge. The three most prevalent disability groups are: musculoskeletal, cardiovascular, and hearing impairment. 56% of persons experience multiple impairment. Not all physical handicaps are readily visible. Half of the disabled population is disabled as a result of 'invisible' impairments.

Two observations are striking in their implications for the development of employment policies for the physically disabled. First, the handicapped population is an older group. Second, the physically handicapped population is heterogeneous virtually predicting varied patterns of unemployment and employment related needs.



## GENERAL DIMENSIONS OF HANDICAPPED EMPLOYMENT

#### 2.1 Employment Status

In Ontario, the working-age physically handicapped population numbers 257,971. The labour force as a sub-population of this group consists of 160,544 persons thus resulting in a labour force participation rate of 62.2%. Interestingly, this rate does not vary significantly from the non-disabled population (66.8% in 1980) indicating that a similar percentage of both groups voluntarily remain outside of the labour force.

Unemployment rates, however, are in dramatic contrast. While the larger labour force experienced an annual average unemployment rate of 6.9% in 1980, the unemployment rate for the physically disabled stands at 29.7%.

# 2.2 Employment Status by Occupation

The handicapped labour force disaggregates by the following occupational categories: clerical, sales, service, farming-fishing-mining, manual labour, semi and skilled trades, transportation, supervisory, teaching, scientific-technical, social and artistic, executive-managerial, other.

Greatest proportions of the total unemployed were found in the clerical, manual labour, and semi and skilled trade sectors. Smallest proportions were located in the farming-fishing-mining, and executive-managerial occupations. These findings roughly correspond with frequency distributions, i.e. attachments to clerical occupations command the greatest share of the handicapped labour force while the farming-fishing-mining sectors command among the lowest.

A review of each sector reveals that persons associated with the transportation sector (followed by those in manual labour and teaching) experience the highest rate of unemployment (44.7%). Executive-managerial and social-artistic personnel experience the lowest levels of unemployment of all occupational categories.

Only selective comparisons to the larger population are possible due to the use of incompatible categories. Compatible categories are: managerial, teaching, clerical, sales, service, and transportation. In every instance unemployment rates displayed by handicapped workers substantially exceed the rates exhibited by the larger (Canadian) labour force.



# 2.3 Employment Status by Age

Three age categories, for both disabled and non-disabled populations, have been reviewed: 15-24 years, 25-44 years, and 45-64 years.

Two observations are immediately noteworthy:

- (i) unemployment rates are highest in association with the youth group. (The finding that the young disabled experience higher levels of joblessness parallels circumstances among the larger labour force);
- (ii) in each case unemployment levels are greater among the disabled than the non-disabled.

Participation rates are greatest for the 25-44 group replicating the pattern established within the larger population. It is of interest to observe and compare changes in participation rates between the 25-44 and 45-64 age categories for both disabled and non-disabled populations. Whereas the non-disabled participation rate declines by approximately 14% between the two age groups, the rate displayed by the older disabled group represents a decline of 30% indicating the greater presence of a diminished interest in employment among older physically handicapped workers than that exhibited generally.

## 2.4 Employment Status by Sex

In contrast to their male counterparts, handicapped women experience higher rates of unemployment in sum (27.1% vs. 38.3%) and in all age categories. Further, employed males outnumber employed females 2 to 1. Employment per capita is comparable between the sexes only when the 15-24 year age groups are noted.

Lower participation rates for the female group replicate general labour force trends (males -- 71.9%; females 43.1%) although the spread between the sexes in the general labour force is not as pronounced (79.9% to 54.3%).

With one exception (i.e. a greater rate of unemployment among young non-disabled males when compared to their female counterparts) differences between handicapped men and women, with regard to employment status, parallel notable patterns demonstrated by the larger labour force.



### 2.5 Employment Status and Educational Level

Drawing from the experience of the larger labour force where levels of unemployment decline as educational attainment increases, it may have been speculated that the employed disabled would most likely have obtained a higher level of education than the unemployed. This concept is substantiated,  $^{10}$  although contrary to general tendencies, attendance at a community college enjoys a stronger positive correlation with employment than attendance at a university. Disabled community college graduates experience a 12.6% unemployment rate whereas university graduates display a 26.3% unemployment rate. Graduates of technical or trade programs also experience a high rate of joblessness (24.7%) as do persons who possess a completed secondary school education (32.7%).

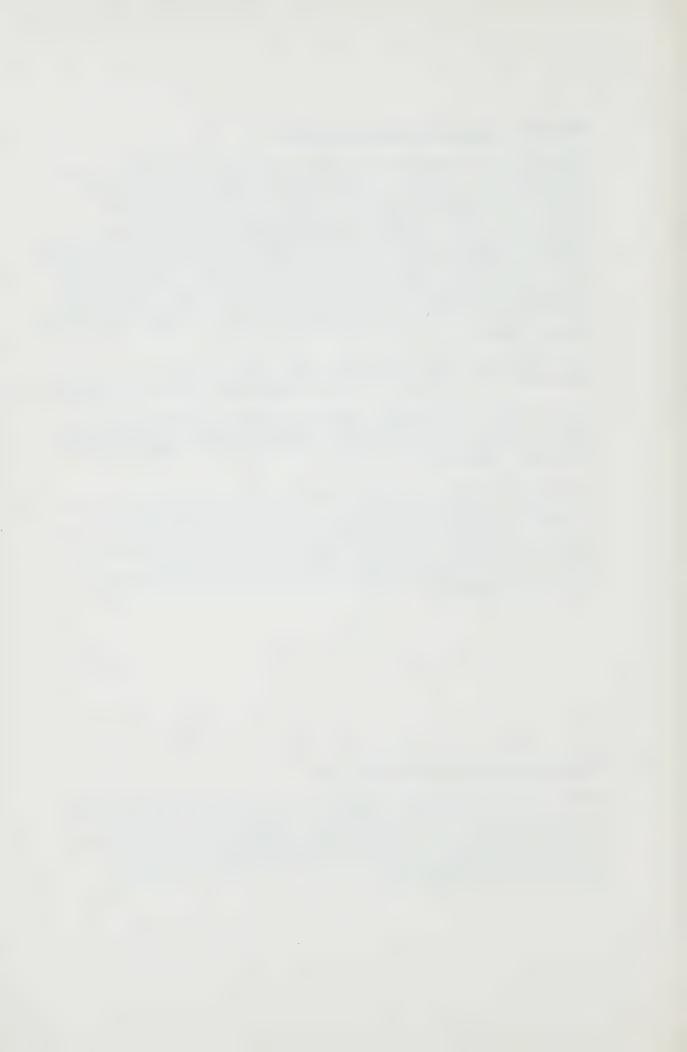
Those remaining outside the labour force were found to have the lowest representation of people who have completed some level of university education.

In an attempt to explore the possible relationship between disability and interaction with the external environment, reasons indicated for discontinuation of education and how this relates to employment status were examined.

For both employed and unemployed groups, non-health related reasons (e.g. goal achieved) predominate. Furthermore, barriers such as problems in getting to the educational institution, physical structure of the building were not major reasons for the discontinuation of education. However, among the unemployed, 6.3% reported health problems as the main reason for not continuing compared to 3.6% of the employed.

# 2.6 Employment Status and Community Type

There is little difference between urban and rural community locales with respect to the employment status and proportions of people remaining outside of the labour force. Percentages of employed and unemployed are slightly greater in urban locations while the proportion of non-participants in the labour force is slightly greater in rural communities.



## 2.7 Previous Work Experience

The majority (93.6%) of the unemployed disabled have, at some time, been employed. Only 6.4% or 3,100 persons do not possess employment related experience. This number of persons represents 2.0% of the total handicapped labour force.

A possibly low estimate of work experience among non-participants in the labour force would be the notation of those who report themselves to be retired. 164,300 handicapped persons have identified themselves as retired from the labour force. L1 This figure represents 53.0% of the 'other' group or 36.0% of the entire handicapped population.

## 2.8 Duration of Unemployment

The average length of unemployment experienced among the non-disabled during 1980 was 13.9 weeks. Thirty-two percent of the unemployed remained jobless for more than fourteen weeks.

In comparison, 80.2% of unemployed disabled persons have been jobless for upward of 26 weeks (6 months) or twice as long as the average duration experienced by the non-disabled. Nearly one quarter of the jobless handicapped have been unemployed for seven or more years.

# 2.9 Full-Time vs. Part-Time Employment

19.4% of the handicapped labour force, or 27.8% of those employed, work on a part-time basis. Conversely, 50.9% of the same labour force, or 72.2% of the employed, work full-time.

When compared to the larger labour force it is evident that more disabled persons per capita are employed part-time than non-disabled persons (13.1% of the larger labour force or 14.0% of those working).

One striking difference between the sexes is that there are relatively few males employed part-time through the most productive years (more are employed full-time), whereas a significant proportion of females do work part-time during this period. This tendency replicates general labour force patterns.

Both sexes show a high proportion of part-time workers below 25 (also immitating general trends) and over 50. Lower full-time employment levels are noticeable with regard to these age groups. While present, these trends are less pronounced within the male group.



#### 2.10 Employment Status by Personal Income

As may be expected, a greater percentage of the unemployed (81.0%) than the employed (35.1%) receive incomes under \$10,000.00 per annum. Conversely, a greater percentage of the employed (64.9%) than the unemployed (18.9%) earn more than \$10,000.00 per year. Again according to expectation, more persons employed on a full-time basis are located in higher income brackets than their part-time counterparts. Men tend to earn higher wages than women.

Twenty-four percent of the unemployed report no income at all. Almost three times as many women (to men) identify with this circumstance. Interestingly, 1.1% of employed individuals also declare an absence of income.

Constituents of the handicapped labour force may receive income from one or more of four sources: wages or self-employment; other personal; public assistance; private insurance. Most (88.5%) report some earnings from wages or self-employment. A substantial proportion (50.8%) receive public assistance while 10.6% are recipients of private insurance benefits. Slightly more than one-third also draw from other sources of personal income.

Of the unemployed receiving public assistance, 50% receive more than one type of benefit. Eighteen percent of persons employed part-time and 15% of those employed full-time also receive two or more kinds of public assistance.

On average, individuals employed on a full-time basis draw income from 1.91 sources. Those employed part-time average 2.31 sources and the unemployed indicated a reliance on 2.35 sources of income.



#### 2.11 SUMMARY

An investigation of the general dimensions of employment within Ontario's handicapped community has determined that:

- o The handicapped labour force consists of 160,544 persons. (The working-age population numbers 257,971).
- o Although participation rates for disabled and non-disabled populations do not differ appreciably (62.2% vs. 66.8%), levels of unemployment do. In 1980, the larger labour force experienced an unemployment rate of 6.9% while the disabled recorded a rate of 29.7%.

The finding that aggregate participation rates associated with the physically disabled and the non-disabled are similar indicates that comparable proportions of persons in both groups voluntarily opt out of labour force activity.

In contrast to the larger labour force it is evident that handicapped workers in all occupational sectors face greater prospects of unemployment. Still, within the physically disabled labour force, a substantial number of people (70.3%) are employed. In answer to the question: 'what factors distinguish the employed disabled from the unemployed disabled?', it was found that:

- o Youth and sex (female) negatively influence employment status:
- o The employed were more likely to have pursued their education further than the unemployed;
- o The employed were less likely to have discontinued their education for health-related reasons;
- o Community type (urban or rural) did not influence employment status;
- o The absence of previous work experience was not widespread among the unemployed (only 6.4% lack such experience) -- making this a significant factor to very few (3,100 persons).

Duration of unemployment statistics suggest the presence of severe unemployment. Eighty percent of unemployed disabled workers have been jobless for upward of 26 weeks. This is twice the average length of time spent without a job in the larger labour force. Extended unemployment may be reflective of:

- o persistent barriers;
- o the economic climate;
- o age;
- o the actual employment potential of an individual;
- o actual interest in securing employment.

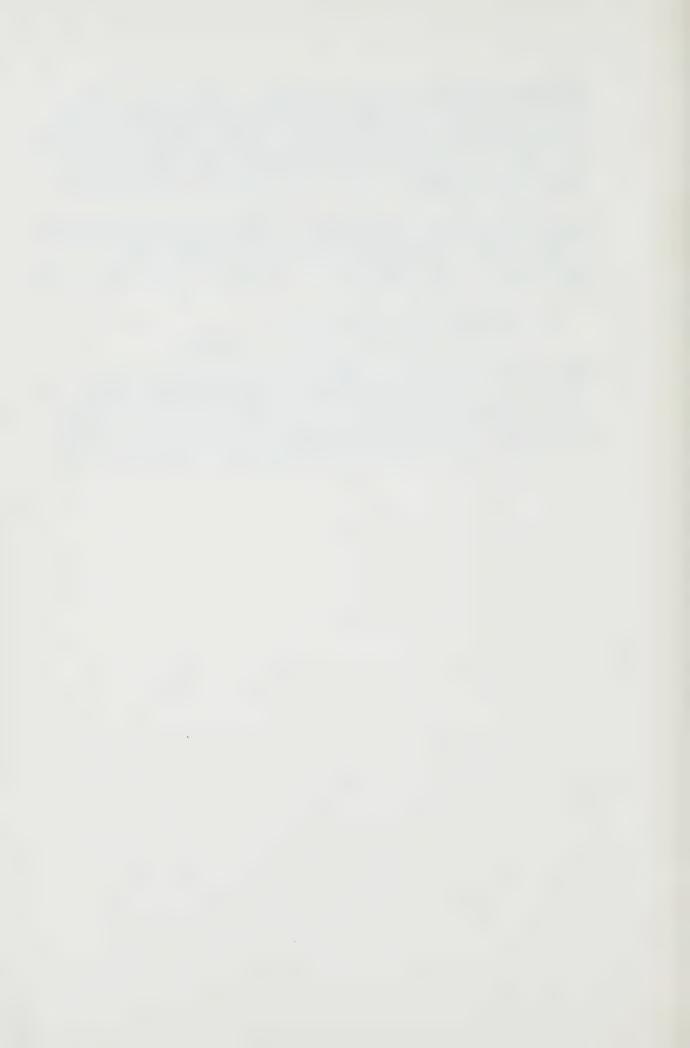


Previously observed tendencies regarding the relationship between age, sex, education, and employment status parallel those exhibited by the labour force generally. Another occasion where patterns are replicated involves the incidence of part-time employment with respect to certain sub-populations (i.e. males 15-24 years and female age categories). Comparable levels of employment on a part-time basis are actually recorded.

An aggregate overview of employment on a full or part-time basis does disclose however that more physically disabled workers are employed on a part-time basis than non-disabled workers (19.4% vs. 13.1% respectively). The difference may be indicative of the extent of under-employment or it may reflect:

- (i) personal preference/convenience
- (ii) realistic limitations imposed by disability

While not surprising to note that the employed are in a better income position than the unemployed, it is interesting to observe that 15% of the full-time employed and 18% of the part-time employed are also in receipt of two or more kinds of public assistance. Further, 22% of persons within the handicapped labour force reporting income from wages or self-employment also indicate that they are unemployed.



# 3. LABOUR FORCE ACTIVITY BY DISABILITY GROUP

# 3.1 Employment Status Profile

As previously listed, ten aggregate categories of disability have been identified by the Ministry of Health. Congruent with disability group size, the musculoskeletal and cardiovascular groups maintain the largest labour forces. They are followed (not in order of prevalence) by those with neurological disabilities, endo-meta-nutr. disorders, alimentary problems, sight impairments, neoplasms, and speech impairments. In every instance, significant numbers of working-age persons remain outside of the labour force.

The heterogeneity of the physically handicapped community virtually predicts diverse labour force performance patterns on the basis of disability type. Statistical evidence confirms prediction. In descending order of magnitude unemployment rates by disability group are:  $neoplasm^{13}$  (70.4%); respiratory (44.2%); musculoskeletal (32.9); neurological (31.0%); alimentary (30.2%); sight impaired (24.8%); cardiovascular (24.5%); neurological endo-meta-nutr. (18.1%); neurological (17.6%) -- the last four groups falling below the overall handicapped unemployment rate (29.7%).

A glance at participation rates reveals that only three groups (alimentary, respiratory and musculoskeletal) register levels of participation above the aggregate handicapped rate (62.2%). Sight and hearing impaired groups exhibited rates some fifteen percentage points below this level meaning that proportionately fewer of the constituents of these two groups are involved in labour force activity.

The participation rate (72.9%) associated with those with musculoskeletal disorders exceeds that recorded by the non-disabled (66.8%). Other groups where the two rates vary by less than ten percent are: respiratory (62.1%); alimentary (61.7%); neurological (58.3%); and endo-meta-nutr. (58.1%).

Unemployment rates for each group surpass the level (6.9%) recorded by the Ontario labour force in 1980. Four groups come within twenty percentage points of that level (hearing impaired (+10.7%), endo-metanutr. (+11.2%), cardiovascular (+17.6%), and musculoskeletal (+17.9%), while the remaining groups surpass the 6.9% level by greater than twenty percentage points.



# 3.2 Disability Group by Age

In most cases a substantial constituency of persons (i.e. 25%) may be observed to be between the ages of 15 and 45. The two groups where this is not the case are the cardiovascular and neoplasm groups. By the same token, in every instance (but for the neurological disability group) greater than fifty percent of constituents are between 45 and 65 years of age. 15

## 3.3 Full-Time vs. Part-Time Employment by Disability Group

Available data was examined with respect to disability type and full-time versus part-time employment. With respect to employed persons, two groups displayed an incidence of part-time employment which far surpassed the aggregate level of 28%. These groups were: respiratory (48.6%); and endo-meta-nutr. (40.5%).



#### 3.4 SUMMARY

Labour force performance patterns were observed to differ by disability group. Indeed, disparate levels of unemployment suggest the presence of varied job-related needs.

Age distributions by disability group were discussed. Unfortunately a three-way cross-tabulation with employment status was not possible. It is, however, interesting to comment upon age for reasons of need priorization. As previously noted, the highest level of unemployment within the entire handicapped labour force is experienced by the youth group yet only three disability groups find more than fifteen percent of their constituents in this age category (respiratory -- 19.2%, sight impaired -- 18.6%, and neurological 16.6%). For four groups, five percent or less of constituents are drawn from this age class (cardiovascular -- 1.2%, neoplasm -- 1.9%, endo-meta-nutr. -- 3.8%, musculoskeletal -- 5.5%). In contrast to the 25-44 year age group, persons between 45 and 65 experienced a higher unemployment rate. With respect to each disability group often substantially greater than 48.0% of individuals fall into the older class. Having observed the statistics on previous work experience, it would be reasonable to assume that most of these individuals have exhibited a prior labour force attachment.

Thus it may be that the need for employment-related services or assistance for young people is greater among certain groups while, for all groups, services designed to meet the employment needs of older persons is a pre-eminent concern. A disaggregation of the older group further reveals that, for six groups, over forty percent of constituents fall between 55-65 years. These groups are: neoplasm (64.8%), cardiovascular (64.4%), sight impaired (50.4%), hearing impaired (45.3%), endo-meta-nutr. (44.9%), and respiratory (41.0%).

With regard to part-time vs. full-time employment, two intervening variables preclude making the assumption that disability type acts on basis of employment. They are age and sex. All of the disability groups cited in the preceding paragraph are predominantly older. Previous findings have indicated that the incidence of part-time employment increases with age and is higher among women. Self-perception of severity of disability may also be an (unexplored) factor.



# 4. DEMAND FOR EMPLOYMENT OR EMPLOYMENT-RELATED SERVICES

The notation of a high level of unemployment in association with a particular group, such as the physically handicapped:

- o suggests that the employment-related needs of that group are not being met; and
- o prompts a call for government intervention.

From The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario and complementary studies performed for OMC, it is possible to accurately determine:

- o the extent of interest in employment among the unemployed disabled;
- o interest in job training;
- o type of job training requested; and
- o the placement of employment-related needs among a hierarchy of need categories. 17

## 4.1 Extent of Interest in Employment Among the Unemployed

Nearly two-thirds of the unemployed are interested in a job. This represents 29,490 people. As a result of the older age demographic, 61% of persons indicating interest are over forty. Similarly, of disinterested persons, 68% are over fifty.

An inside look at the three standard age groups reveals that 91.2% of unemployed 15-24 year olds would like a job; 73.6% of those 25-44 are interested in employment; 50.3% of unemployed persons between 45 and 64 would like to work thus confirming speculation surrounding diminished interest in employment.

When explored by primary disability group classification, those who are more interested in a job than not were found to have respiratory, musculoskeletal, sight and hearing impairments. Groups where disinterested predominates are neoplasm, alimentary, cardiovascular, and endo-meta-nutr. Again, these are groups in which older persons predominate.

Neoplasm and alimentary disability groups previously displayed unemployment rate above the aggregate handicapped unemployment rate. The finding that, disinterest in employment predominates in both groups indicates that in these two instances, recorded levels of unemployment are actually substantially inflated.



# 4.2 <u>Interest in Job Training</u>, and Type of Job Training Requested Among the Unemployed.

Over half (63.6%) of the unemployed indicated either a lack of interest (55.4%) or a certain ambiguity (8.2%) regarding the prospect of job training. Approximately 13,311 persons felt that such training would be beneficial.

Of those requesting training, just under two-thirds favoured training in manual skills. Job seeking skills ranked second.

When the unemployed who declined job training were asked to specify why, 46.3% cited health problems. The extent to which health problems interfere in a person's inclination/ability to pursue training may be indicative of his/her inclination or ability to pursue competitive employment. In order of selection (all under 10%) the following other reasons for refusal were cited: no special reason; mobility difficulties; tried - didn't help; don't know where; and not available. Nearly one-third identified other (unspecified reasons).

Some employed persons and non-labour force participants indicated a desire for additional training as well. Due to the community age demographic, the greatest number of persons requesting training are in the 41-65 year age range followed by those between the ages of 18 and 40.

Looking within these two age categories however, only 12.4% of the older group compared to 33.9% of the younger age group would appreciate further training. Of those seventeen and under, one-third requested additional training. (This finding is not surprising as constituents of this age group may not have completed their basic education).



# 4.3 Major Areas of Need as Identified by the Physically Handicapped Community

Out of a listing of seventeen need areas, 'assistance in finding a job' ranked eleventh followed by 'finding a job training program' which ranked fourteenth. 'Alleviation of discrimination by the public' (which ranked twelfth) and 'school or educational programs' (fifteenth) may be indirectly related to employment and should be considered. In any event, employment-related needs do not enjoy a prominent placement in the overall needs hierarchy.

# 4.4 Job Placement and the Employed

Social or government organizations were credited with assistance in obtaining a job by 2.1% of employed persons. Private placement agencies were identified as having been helpful by 1.1%.

The majority (72.8%) attribute their own skills with winning them employment while some (4.9%) applaude positive employer attitudes.

A greater proportion of the unemployed in contrast to the employed indicated that they had experienced discrimination by employers suggesting that the absence of positive employer attitudes is more keenly felt by those who remain unemployed.

## 4.5 SUMMARY

Two-thirds of the unemployed disabled expressed an interest in immediate employment. Interest in employment was keenest within the 15-24 year age group and declined steadily with increasing age. An exploration of interest by disability group revealed that:

(i) levels of interest varied; (ii) unemployment rates for certain groups (neoplasm and alimentary) may be overstated.

Slightly over 13,000 of the unemployed felt that job training could enable them to find employment. Almost two-thirds of the unemployed group declined the suggestion — the majority citing health problems as preventing them from pursuing training. Manual skills training was the preferred option while training in job seeking skills ranked a distant second. Level of interest in training roughly parallels level of interest in employment when age categories are examined.

Within the larger handicapped community, direct and indirect employmentrelated needs ranked low in the needs hierarchy. Their placement may be expected to rise if considered with respect to labour force participants only.

Positive employer attitudes and government support efforts were not widely credited with facilitating employment. Most employed persons expressed a reliance on their own skills and abilities.



#### FOOTNOTES

- 1. For statistical support, see Appendix II: Tables 1-15.
- 2. See: Appendix II, Table 29.

As a point of reference approximately twenty-one percent of Ontario's total population 15 years and over possesses a grade school education. Another 52.9% have gone on to high school. The remaining 26.1% have pursued or completed some type of post-secondary education. A rough comparison to the handicapped indicates that greater proportions of people from the disabled community may be found to possess public school education only (21% vs. 36.6%) while fewer are in possession of secondary (26.1% vs. 14.9%) levels of educational attainment.

This may be an inaccurate comparison as Statistics Canada figures are based on populations over 15 years of age whereas handicapped tallies include all ages. Proportions of persons under fifteen within the disabled community are, however, small.

- 3. It should be noted that due to the broad income category steps employed in the 'Survey' an inflationary tendency has been introduced. Actual incomes may, indeed, gravitate toward the lower end of a given income range. Also, income may not be an accurate measure of financial hardship or ease. Family obligations or extraordinary (medical) costs may intervene.
- 4. For a more extensive list of specific impairments see: Appendix I.
- 5. The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario, Volume IV: Data Analysis, p. 60 and 63. (Prepared for the Ontario Ministry of Health)
- 6. The incidence of physical disability in Ontario is compared to that in other jurisdictions in 'Comparative Statistics on Selected Handicapped Populations: Canada, California, the United States', OMC, 1981.
- 7. The participation rate represents the number of individuals declaring active labour force attachment as a percentage of the (group) population.

The unemployment rate is the percentage of unemployed persons within the labour force.

- 8. Statistical documentation is provided in Appendix II: Tables 16-43. Due to questions surrounding statistical reliability, introduced by anticipated diminished cell sizes, certain useful multivariate cross-tabulations were not possible.
- 9. At least part of: trade school, community college, or university degrees.



- 10. Over 33% of those unemployed have only up to grade 8, whereas 24% of the employed stopped at this educational level. The relationship is less noticeable among those obtaining up to a grade 13 education. 72.7% of the employed and 78% of the unemployed have pursued their education to a secondary school level. It must be remembered that age intervenes. The older age group was found to have a lower level of educational attainment and a higher unemployment rate than the 25-44 year age group. Unfortunately, questions surrounding statistical reliability precluded a multivariate cross-tabulation which would have explored the effect of age and education (together) on employment status.
- 11. Sociodemographics and Need Related Characteristics of the Physically Handicapped in Ontario: Volume IV, Data Analysis, p. 91 & 96.
- 12. Statistical support is located in Appendix II: Tables 44-49.
- 13. The degenerative espect of neoplasms may contribute to the unemployment level for persons afflicted with these conditions. Another intervening variable may be age -- 64.8% of persons comprising this group are between 55 and 65 years of age. (Another 23.5% are over 45). Other groups where greater than fifty percent of constituents of working age are located in the older age category are cardiovascular and the sight impaired.
- 14. The total score of 62.2% may be skewed somewhat by the high participation rate recorded by the musculoskeletal group. Conversely, the low score submitted by the neoplasm group may result in a downward 'tug'. The participation rate surpressing these two groups, rests at 57.8%.
- 15. Due to limitations with the data, employment status by age and disability group, and employment status by sex and disability group disaggregations were not possible.
- 16. Appendix II: Table 46.
- 17. Statistical support is located in Appendix II: Tables 50-58.

Responses of self-categorized unemployed labour force participants, not falling within the working age population, are included (approximately 900 cases). With respect to interest in job training indicators, responses of persons not identified as labour force participants are reported. These statistics are later used to estimate the extent of possible involuntary labour force exclusion.



#### PART II

### FACTORS AFFECTING HANDICAPPED EMPLOYMENT

### 1. Job Barriers

Three job barriers of particular consequence to the physically handicapped community have been identified. They are: employer attitudes, work-site architectural barriers, and transportation.

#### 1.1 Employer Attitudes

It is frequently opined that high levels of unemployment among the handicapped may be linked to employer beliefs that disabled workers:

- o cannot meet or sustain required productivity levels;
- o introduce initial and continuing extraordinary costs;
- o precipitate escalating insurance coverage costs;
- o provoke co-worker dissension.

Various studies 1 focussing on the working disabled challenge these beliefs illustrating that:

- o production levels are high;
- o quality of work is superior;
- o attendance and punctuality records are good;
- o special work arrangements or major work site modifications are not usually necessary;
- o the handicapped display better than average safety records;
- o adequately trained and properly placed disabled workers do not inflate insurance premiums;
- o disabled workers are readily accepted by other workers.

Still 2.2% (or 2,500 persons) of all handicapped Ontarians felt that they experienced discrimination during the process of either locating or maintaining a job.  $^2$  This figure rises to 6.3% among the unemployed.

#### 1.2 Work-Site Architectural Barriers

Many work areas are inaccessible or unsuited to disabled employees. Three percent of the physically disabled community identify access problems as a limitation to their employment. Of the unemployed, this figure reaches 8.6%. Of the entire group:

"Approximately 42% of the handicapped population (173,416 people) report difficulties entering buildings in their own community. The most common reasons given relate to the weight of doors, crowds of people, no railings on stairs and the distant location of parking lots from the building". 3



Employment-related buildings pose difficulties for 32.5% of the disabled. Furthermore, information gathered by the Ministry of Health reveals that 5.1% of employed persons encountered environmental barriers on-the-job, 5.2% experienced problems with equipment and tools, and 0.4% felt that personal conveniences were poor.

Buildings constructed after the implementation of <u>The Building Code</u> <u>Act, 1974</u> which are equipped with ramps, elevators and accessible toilets may even present unnecessary hazards to individuals with mobility problems such as heavily waxed or thickly carpeted floors.

The cost of suitable modifications are not always high particularly when incorporated in the original design, but modifications to an existing structure are not usually considered part of a normal business budget. The federal government has concluded that employers are unwilling to make suitable modifications unless compelled or encouraged to do so 4.

# 1.3 Transportation

Transportation, both during the job search and to a regular place of employment, presents a serious problem. In About Barriers, the American Architectural and Transportation Compliance Bureau has identified this item as being a major contributing cause to handicapped unemployment.

Indeed, in Ontario 1.3% of the unemployed disabled cite transportation difficulties as a factor responsible for their employment status. Generally, 38.7% of the community felt that more information concerning available public transit services would be beneficial. A ranking of major areas of need, as disclosed by the Ministry of Health survey, finds transportation as the sixth ranked need with 30.0% (or 136,700 persons) indicating that an improvement of service would enhance their lives.

In Ontario, upward of sixty municipalities provide conventional transportation<sup>5</sup>. Evidence indicates that 39,300 physically disabled persons residing in the province are unable to use such transit facilities. Additionally, 3.4% of the handicapped require human assistance to be able to make use of transit while another 3.4% rely on assistive devices to do so. The most serious difficulty reported concerns 'getting on and off' (15.8%) followed by 'poor or non-existent' service (23.7%), 'getting there' (10.9%), and the location of the transit facility (3.2%). Problems with escalators affect 0.3% of the handicapped<sup>6</sup>.

Greater numbers report being able to use transit although with difficulty -- 15.1%, or without problems -- 46.2%. Almost one quarter of disabled citizens live in areas where transit is unavailable.

Thirty-four Ontario municipalities do provide special transportation however, even where this is provided on a long-term basis, it does not necessarily result in equal opportunity for disabled workers<sup>7</sup>. Service is usually restricted to regular working hours and not flexible to short-notice arrangements.

Remaining options include taxis and specially modified cars or vans.



# 2. Level of Aggregate Demand

Although the effect of aggregate demand on handicapped unemployment has not benefited from exhaustive study in the Ontario context, available literature suggests that, similar to other structurally disadvantaged groups, demand deficiency increases the level of unemployment among the disabled community.

Stating that the disabled are disproportionately affected by labour market changes, an American source observes that:

- o disabled job-seekers fare less well than able bodied job-seekers during periods of economic recession, and
- o this group is also negatively affected "by structural changes which reduce the number of lower skilled, low-paying jobs to which they are disproportionately relegated". 8

In support, the authors cite data collected during the 1966 and 1972 disability surveys conducted under the auspices of the U. S. Social Security Administration. They note that between the two survey dates: (1) economic growth had slowed, (2) labour force participation had increased generally and particularly among youth and women, and (3) the percentage of severely and occupationally disabled persons who were not in the labour force moved substantially upward. Furthermore levels of employment for this group declined by four percentage points while, in contrast, employment among the non-disabled moved upward by six percentage points.

Although it is not possible to observe handicapped labour force patterns over the same period, participation rates recorded by youth and women in Ontario have increased in the last decade (1970-1980). If a causal relationship between enhanced labour force participation by other groups and handicapped unemployment or labour force withdrawal does exist, as speculated upon in the United States, a result — similar to that noted south of the border — may be assumed to have occurred in the Ontario context.

Looking at the disabled group, the American authors partially attribute a significant (14%) increase in the number assessing themselves to be unable to work regularly or not at all to a "marked decline in availability of regular work". Such a shift in self-assessment might also be indicative of the "discouraged workers" syndrome. As noted in the 'Youth Employment Paper', the presence of this effect may lead to an understatement of the unemployment rates of a specific group.

# 3. Worker Substitution

A relationship between levels of aggregate demand generally and handicapped employment status has been observed. This, in tandem with employer reluctance to hire the disabled, is likely to result in downward pressure on job opportunities for the handicapped during periods of influx of able-bodied persons into the labour force.



As noted in the staff paper 'Youth Employment In Ontario: 1980-1985', 10 such an influx is anticipated to continue -- brought about by:

- o greater increases in female participation;
- o expansion of the prime age labour force;
- o greater availability of older workers. 11

# 4. Wage Fixing, Wage Permits

With regard to youth, the case has been argued that labour market interventions, which determine a specific minimum wage, adversely affect employment. While there is an absence of literature on this subject as it pertains to the disabled, employer concern over the productivity of this group introduces the question of minimum wage or standard pay scale as a deterrent to handicapped employment.

Although the province does issue wage permits which exempt the employer from paying minimum wage to signateur workers only 89 permits had been issued to private businesses providing competitive employment in  $1980.\overset{12}{.}$  It would appear that:

- o employers are generally unaware of the existence of wage permits;
- o the criteria used to award wage permits is inappropriate;
- o employers are reluctant to hire the disabled regardless of the availability of wage exemptions;
- o 'other' employee resistance is present;
- o wage permits are distasteful to handicapped workers who consider themselves to be/and are fully productive workers.

A recent study conducted for the Ontario Handicapped Employment Program endorses the procedural aspects of issuing such permits thus eliminating this reason as a deterrent to their widespread use. In any event, it is doubtful that unemployment rates have been significantly reduced by wage exemptions.

# 5. Preparation for Labour Market Entry

Higher levels of unemployment among the young disabled (and among disabled women) suggest that, as is the case generally, the following factors affect employment status:

- o lack of familiarity with the dynamics of the labour market;
- o lack of occupational skills;
- o lack of work experience.



## 6. SUMMARY

A variety of factors -- economic, attitudinal, personal and disability - specific, interact to affect:

- o available employment opportunities;
- o the ability of handicapped workers to take advantage of available opportunities;
- o the level of unemployment experienced by the physically handicapped.

While an economic upturn may result in increased job opportunities and lower levels of unemployment generally, certain segments of the disabled labour force (due to logistical barriers, inadequate preparation, or negative attitudes directed toward disability) will continue to face difficulty in gaining or maintaining employment.



## FOOTNOTES

1. Such studies include:

Nathenson, Robert B., Ideas for Action, The Harvard Business Review, May-June 1977.

"Du Pont Article". Article reprinted by California Governor's Committee for Employment of the Handicapped, May 1974.

The Canadian Chamber of Commerce, Report on the Employability of the Handicapped, 1975.

- 2. The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario: Volume IV, Data Analysis p.92 & 99. Also see Appendix II: Table 61.
- 3. Ibid, p. 83
- 4. Canadian Employment and Immigration Commission, Access to Employment for the Physically Disabled in the Private Sector, Ottawa. (Information copy of draft submission).
- 5. Source: Office of the Provincial Rehabilitation Co-ordinator.
- 6. Volume IV: Data Analysis, p. 103-105.
- 7. Ministry of Transportation and Communications, Transit Office, Downsview.
- 8. Levitan, S. A. <u>etal</u> 'Employment Problems of Disabled Persons', in Monthly Labour Review, V100 (3) 1977 p. 8.
- 9. Klein, J. V. Technological Change and Employment Opportunities for Disabled Persons, p. 25.
- 10. 'Youth Employment in Ontario, The Ontario Manpower Commission p. 22.
- 11. Subject to retirement age extensions and the inability of pensions to keep pace with inflation.
- 12. Wage Permits for Handicapped Employees. Prepared for the Handicapped Employment Program by Abt Associates, December 1980, p. 3.
- 13. The Ontario Manpower Commission, Youth Employment in Ontario, p. 27.



## PART III

# HANDICAPPED EMPLOYMENT OUTLOOK: 1981-1986

# 1. <u>DEMOGRAPHIC OUTLOOK - GENERAL DIMENSIONS OF THE HANDICAPPED</u> COMMUNITY

By the year 2001, the handicapped population is expected to increase by 41.5% to 747,153 persons or 7.6% of Ontario's total population. This latter figure represents a 2.2% increase over the next twenty years in the percentage of Ontario's population that is physically handicapped.

The age profile of the physically disabled is also expected to change with greater numbers of older persons becoming evident. Also.

"The disability profile will change over the forecast period. Those types of impairments which tend to afflict older people will increase most, both in absolute number and in the percentage of the disabled population for which they account".

Consequently, sight impairments, cardiovascular impairments and hearing impairments will become more prevalent.

Within the handicapped community, the percentage of working age constituents will decline slightly while real numbers may be anticipated to move upward<sup>3</sup>. If a 62.2% participation rate is assumed to continue, the disabled labour force should number 229,002 by 2001. This represents an increase in labour force size of 42.6%. Expressed as a percentage of the estimated labour force  $(4,110,000)^4$ , the number of handicapped workers will constitute 5.8% of the provincial workers.



# 2. Occupational Areas

In order of predominance, persons in semi -, and skilled trades (17.1%), clerical occupations (13.7%), service occupations (14.9%) and manual labour occupations (8.2%) account for greater than half of the handicapped labour force<sup>5</sup>.

A previous staff report, presenting a range of growth scenarios, has predicted that total employment in Ontario between 1980 and 1985 will increase more slowly than in the previous decade. However, even in face of this event: (i) shortfalls of white and blue collar workers; and (ii) and substantial growth in the trade and service sectors, are anticipated. Such developments could be beneficial to disabled persons maintaining occupational attachments in the appropriate areas.

# 3. Economic Conditions

Economic uncertainties coupled with the absence of historical data exploring the relationship between economic conditions and handicapped unemployment in Ontario make it difficult to quantify unemployment forecasts. One observer has, however, noted that:

"the disadvantaged are usually the last to be hired and the first to receive layoff notices. Handicapped workers' jobs are particularly sensitive to the state of the economy "7.

American observers were found to concur noting that, during periods of economic recession, handicapped participation in the labour force declined<sup>8</sup>.

The tendency to withdraw from the labour force may further complicate attempts to forecast unemployment levels.



# 4. The Impact of Technology

Applications of advanced or specialized technology retain the capacity to either enhance or jeopardize the employment prospects of the disabled.

## Job Opportunities

Applications of advanced technology are both creating new job opportunities and altering the way in which traditional jobs may be performed.

"Technological change, by substituting mechanical (effort) for human physical effort, has meant that not as many jobs are automatically precluded for those with disabilities ... more jobs have been brought within the potential purview of the disabled" 9.

Computer based products may be used to enhance employment opportunities by modifying standard equipment thus facilitating its use by the sensory impaired (e.g. the 'Talking Word Processor'). Also telecommunications linkages, which make employment from the home possible, possess the potential to introduce mobility-restricted persons to labour force activity.

Occupational growth sectors where the handicapped may be readily integrated include the fields of: telecommunications, information management, word processing, and computer programming 10. Departments of Vocational Rehabilitation (HEW) in the U.S. have initiated 'Projects with Industry' to train handicapped persons in various of these areas. Certain projects have experienced a 95% placement rate 11.

#### Displacement

General labour displacement, thought to accompany the commercial usage of microelectronics technology, if realized, will also result in the displacement of handicapped workers 12. Previous sections have noted the effects of aggregate demand for on the employment status of the physically disabled. Reductions in demand brought about by the substitution of technology for labour may be expected to inflate unemployment levels within the handicapped community particularly for those persons with a record of employment in routinized occupations.

# Specialized Technology

Finally, bioengineering technologies may be applied to enhance the quality of life and work potential of individual handicapped persons. A report prepared for the (American) National Science Foundation by the U. S. Urban Institute notes handicapped unemployment rates and opines that:

"the adaptation of technology for handicapped individuals has been hampered by a scarcity of people trained and educated in the application of engineering principles to the handicapped "13.

The authors cite a previous Urban Institute study (The Comprehensive Services Needs Study) which demonstrated that the disabled community has benefited less than the non-disabled population from higher wages and other labour market improvements consequent of technology advances.



# 5. Education and Special Training Needs

An earlier section noted the effects of level and type of education on employment status. The significance of this variable is likely to be heightened as:(1) educational level continues to be "used as a proxy for the individual's potential productivity" 14;

- (ii) greater numbers of new workers, in possession of higher levels of education, enter the labour force $^{15}$ ;
- (iii) the tendency for better educated persons to assume jobs that formerly would have been filled by those with less education becomes more pronounced  $^{16}$ .

This, coupled with comparatively higher unemployment rates within the handicapped community emphasizes the importance of effective career counselling (re: the selection of an occupational field), and adequate preparation for work entry or re-entry. Particular attention to the needs of those disabled from birth, or experiencing onset prior to forging a labour force attachment, is indicated. Indeed, while agreeing that the handicapped need as much training or education as possible in the unequal competition for jobs, the Assistant Director of the Western Institute for the Deaf maintains that "there seems to be little preparation in the school system to help (our clients) become responsible members of the work force". Is

The training needs of the greater handicapped population were identified from information contained in The Sociodemographic Survey.

Fewer than 5% of all handicapped people commented that it had been necessary for them to engage in special training in order to prepare for employment. A slightly higher proportion of the unemployed indicated a previous need for special training than those who were employed (11.7% vs. 6.9% respectively). Approximately two-thirds of those who indicated that no special training had been required were in the 'other' category which is most likely characterized by people who do not consider themselves to be actively seeking employment.

Twelve percent of handicapped people (52,700 persons) identified a need for further training or education which they would now like to take. Comparing requests for further training of the unemployed to requests among the employed, it becomes evident that nearly twice as many unemployed would like to have further training than the employed (33.0% to 17.6%). Within the unemployed population, 67% did not feel a need for further training or education. This may indicate that these people feel they have sufficient training and education but are unable to find suitable employment. A possible indicator of involuntary labour force exclusion is the 6.5% of persons in the 'other' category who expressed an interest in further training or education.

Respondents who indicated a need for further training or education were asked to specify the subject area of study. Of those with a clearly identified choice, 24.1% selected Community College (Arts) while 20.1% selected technical or trade programs. Community College (Science) also scored well (7.1%). When the relationship between type of training desired and employment status was explored, the employed population ranked B.A.'s, M.A.'s and Law as their specific area of interest more often than the unemployed who favoured technical/trade schools and arts programs in community colleges.



People with neurological, respiratory, musculoskeletal, alimentary and hearing impairments prevail in a wish to have further training from those who do not. This finding appears to support previous findings especially for people with respiratory and musculoskeletal disabilities who are prevalent in the unemployed group and who indicated an interest in a job.

## 6. SUMMARY

Disabled workers maintaining occupational attainments in the trade and service sectors or in whilte collar occupations where supply shortages are anticipated, should experience an increase in job opportunities available to them.

In spite of predicted general labour force displacement, applications of advanced technology should benefit the physically handicapped in two respects:

- (i) modification of the work environment ("substituting mechanical effort for physical effort");
- (ii) enhancement of bioengineering technologies.

Finally, education and training continue to be of importance to this group particularly in light of their observed sensitivity to the economy.



## Footnotes

- Prepared forecasts, from which the information for this section drawn, were based on a broader population than that represented by the physically handicapped target group discussed throughout this report, i.e. forecasts included impaired as well as disabled persons. Projections for the disabled group only were derived by calculating:
  - the percentage distribution of disabled persons in the 1979-80 Ontario impaired - disabled population (55%). (It was assumed that this ratio would remain constant);
  - (2) the (numerical) size of the handicapped population in a given year by determining 55% of the base number provided by the original projections;
  - (3) The percentage increase in target population growth from period to period to the year 2001;
  - (4) the percentage of Ontario's population experiencing disability in a given year.

The figures reported may be slightly underestimated as:

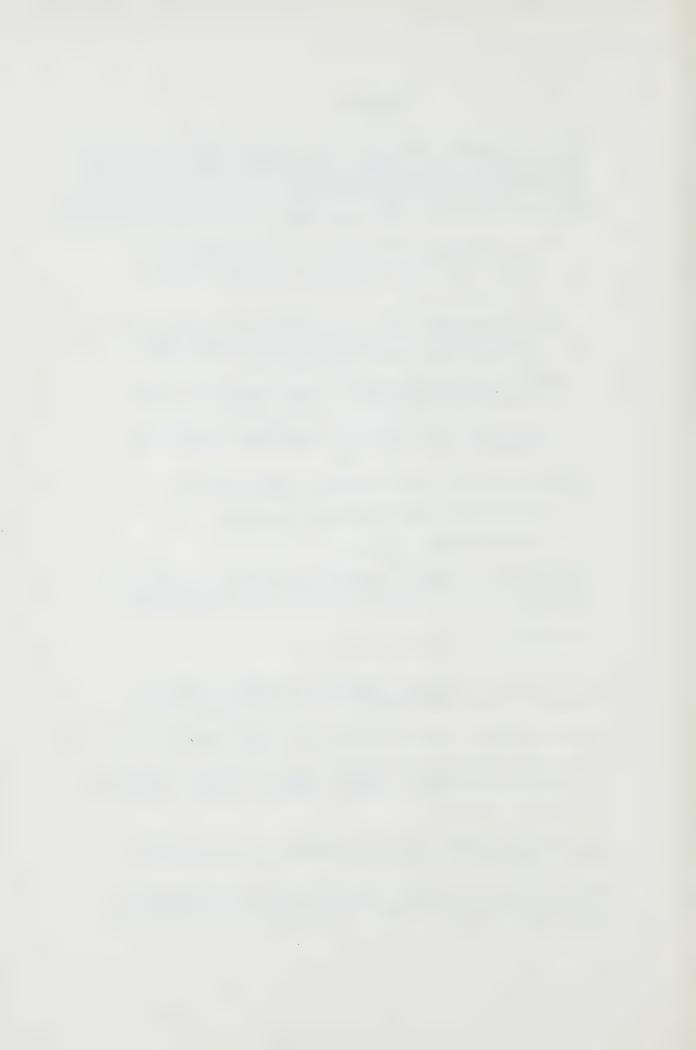
- (1) disability is associated with older age;
- (2) the population is aging.

Consequently, the ratio of disability to impairment among the impaired-disabled should shift somewhat in the direction of disability.

See Appendix II, Tables 62 and 63.

- 2. A Forecast Of The Impaired Population In Ontario 1980-2001.

  Prepared for the Ontario Ministry of Health, August 1981, page 10.
- 3. For the purpose of this discussion working-age refers to 20-64 years.
- 4. Ibid, using a constant participation rate of 66.4%. A Forecast Of The Impaired Population In Ontario 1980-2001, page 9. Table F.3.
- 5. See Appendix II, Table 17.
- 6. OMC Imbalances Between Manpower Requirements and Supplies In Ontario 1980-1985, p. ix, xiv.
- 7. Muir M. 'Last to be hired, first to be fired the physically handicapped worker in Canada'. Physiotherapy Canada, Vol. 30, No. 3, 1978, p. 132.



- 8. See: Part II: Level of Aggregate Demand
- 9. Klein, J. V. Technological Change and Employment Opportunities for Disabled Persons, Department of Manpower and Immigration, Ottawa, 1970 p. 35.
- 10. Ibid. p.
- 11. Linthicum, S., Technical Training for the Severely Disabled, Rehabilitation Literature, V. 38, p. 373.
- 12. Several authors anticipate varying degrees, and durations, of labour displacement. Included are: Ed Finn, labour commentator; Zavis Zeman; M. Howard, Prof. C. A. Jecchinis; L. A. Kelley; W. K. Norris; Y. Rabeau; Prof. C. P. Thornton. See bibliography for specific references.
- 13. La Rocca, J. The application of Technological developments to Physically Disabled People, Washington D. C., 1978 p. 66.
- 14. Klein, J. V. Technological Change and Employment Opportunities for the Disabled, p. 25.
- 15. Youth Employment in Ontario: 1980-1985; Imbalances Between Manpower Requirements and Supplies in Ontario: 1980-1985.
- 16. Zsigmond, Picot, Clark, Devereaux, Out of School Into the Labour Force, Statistics Canada, 1978.
- 17. Additional support for this assumption is drawn from a review of selected vocational rehabilitation client files. Approximately 40% of the clients sampled were under twenty-five years of age. Furthermore, in contrast to the larger handicapped community, the educational profile of persons coming forward for special services is inferior (See Appendix II: Tables 29-32). Also a survey of selected secondary schools, undertaken by the Office of the Provincial Rehabilitation Co-ordinator in the spring of 1981, indicates that schools do not provide enhanced counselling services to handicapped students.
- 18. Muir, M. 'Physiotherapy Canada', Vol. 30, No. 3, 1978, p. 133.
- 19. See Appendix II: Tables 29-32 and 64.



# CONCLUDING OBSERVATIONS

- 1. Although participation rates for disabled and non-disabled populations do not differ appreciably (62.2% vs. 66.8%) levels of unemployment do. The unemployment rate for Ontario's physically disabled labour force stands at 29.7% approximately four times greater than that experienced generally in 1980. Prolonged periods of joblessness are common.
- 2. Factors found to exert a significant influence on employment status were age, sex, and type of disability. Youth and sex (female) were found to negatively affect employment status. Constituents of the neoplasm, respiratory, musculoskeletal, neurological and alimentary disability groups experience higher levels of unemployment than the 29.7% level experienced across the entire handicapped labour force.
- 3. Only 6.6% of the unemployed lack previous work experience. This figure represents 3,100 persons.
- 4. More physically disabled workers are employed on a part-time basis than non-disabled workers (19.4% vs. 13.1% respectively).
- 5. The handicapped labour force, like the community, is an older one.
- 6. Two-thirds of the unemployed disabled expressed interest in immediate employment. Interest was keenest within the 15-24 year age group and declined steadily with increasing age.
  - Approximately one-third of the unemployed felt that job training could enable them to find a job. Training in manual skills was preferred.
- 7. A variety of factors -- economic, attitudinal, personal and disability-specific, may interact to affect: (i) availability of jobs; (ii) the ability of handicapped workers to take advantage of available opportunities; (iii) levels of unemployment.
- 8. Education and training (supported by labour market information) continue to be of importance to this group, particularly in light of their sensitivity to the economy.



APPENDIX I

IMPAIRMENT CLASSIFICATION



# Impairment Classification

Aggregate Category	Specific Impairment or Condition
Endocrine/Metabolic/	Diabetes
Nutritional	Thyroid
	All other gland Diseases
	Obesity
	Other endocrine
Neurological	Epilepsy
	MS
	CP
	Parkinson's Disease
	ATAXIAS - Other
	Pain Unspecified
	Headaches
	Nerves - Demaged
	Spinal Cord Injury
	Brain Damage
	Polio
	Other Neurological Conditions
Cardiovascular/ Arteriovascular	Congenital Cardiovascular
	Acquired Cardiovascular
	Hypertension
	Stroke
	Other Peripheral Vascular
	Blood-Related



# APPENDIX I. (Cont<sup>7</sup>d)

Partial Blindness - Congenital Acquired Total Blindness Acquired Partial Blindness Other Vision Related.  Hearing Impairment  Profound Deafness - Congenital Partial Deafness - Congenital Acquired Deafness - Profound Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech Other Unspecified Speech	Sight Impairment	Total Blindness - Congenital
Acquired Partial Blindness Other Vision Related.  Hearing Impairment  Profound Deafness - Congenital Partial Deafness - Congenital Acquired Deafness - Profound Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Partial Blindness - Congenital
Other Vision Related.  Profound Deafness - Congenital Partial Deafness - Congenital Acquired Deafness - Profound Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Acquired Total Blindness
Hearing Impairment  Profound Deafness - Congenital Partial Deafness - Congenital Acquired Deafness - Profound Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Acquired Partial Blindness
Partial Deafness - Congenital Acquired Deafness - Profound Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Other Vision Related,
Acquired Deafness - Profound Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech	Hearing Impairment	Profound Deafness - Congenital
Acquired Deafness - Partial Disorders of Inner Ear Hearing Impairments - Unspecified  Alimentary Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment Partial Congenital Speech		Partial Deafness - Congenital
Disorders of Inner Ear  Hearing Impairments - Unspecified  Alimentary  Stomach  Intestines - Both  Liver and Gall Bladder  Other Digestive  Kidneys and Urogenital  Hernia  Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Acquired Deafness - Profound
Hearing Impairments - Unspecified  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Acquired Deafness - Partial
Alimentary  Stomach Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		Disorders of Inner Ear
Intestines - Both Liver and Gall Bladder Other Digestive Kidneys and Urogenital Hernia Other Alimentary Unspecified  Speech Impairment Partial Congenital Speech		
Liver and Gall Bladder  Other Digestive  Kidneys and Urogenital  Hernia  Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech		
Other Digestive  Kidneys and Urogenital  Hernia  Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech	Alimentary	Stomach
Kidneys and Urogenital  Hernia  Other Alimentary Unspecified  Speech Impairment  Partial Congenital Speech	Alimentary	
Hernia Other Alimentary Unspecified  Speech Impairment Partial Congenital Speech	Alimentary	Intestines - Both
Other Alimentary Unspecified  Speech Impairment Partial Congenital Speech	Alimentary	Intestines - Both Liver and Gall Bladder
Speech Impairment Partial Congenital Speech	Alimentary	Intestines - Both  Liver and Gall Bladder  Other Digestive
	Alimentary	Intestines - Both  Liver and Gall Bladder  Other Digestive  Kidneys and Urogenital
Other Unspecified Speech	Alimentary	Intestines - Both  Liver and Gall Bladder  Other Digestive  Kidneys and Urogenital  Hernia
		Intestines - Both  Liver and Gall Bladder  Other Digestive  Kidneys and Urogenital  Hernia  Other Alimentary Unspecified



# APPENDIX I (Cont'd)

Respiratory	Asthma
	Chronic Bronchitis
	Emphysema
	All Allergies
	Cystic Fibrosis
	TB .
	Lung-Related
	Other Respiratory
Neoplasm	All Cancers
	Tumors, Cysts
Musculo-skeletal	Rheumatoid Arthritis
	Degenerative Arthritis
	MD
	Orthopaedic Spine
	Orthopaedic Limbs
	Upper Amputation
	Lower Amputation
	Bursitis
	Burns
	Skin Disorders
	Spina Bifida
	Hydrocephalons
	Cleft Palate
	Other Congenital Anomalies
	Other Musculo-skeletal



APPENDIX II

CHARTS AND TABLES



# HOUSEHOLD SURVEY: AGE BREAKDOWN

TABLE 1

\* Note that missing cases and rounding errors account for discrepancies

	FCTIMATED	DODIE ATTOM				
AGE CLASS	IMPAIRED (I)	HANDICAPPED (H)	(H + I) WNS	GENERAL (G) POPULATION	% OF (G) (I + H)	% OF (T) (1 + H)
- 4	1,965	7.860	9 825	000		
- 9	12,988	8,183	21,171	000,609	70.7	7.7
- 14	17,136	10,795	27.931	000,099		2.53
- 19	17,465	13,118	30,583	781,000	3.92	3.34 3.65
					1 )· •	
- 19	49,554	39,956	89,510	2,633,000	3.40	10 60
- 24	10,371	7,605	17,976	806,000	2.23	. 2.15
- 29	13,122	9,852	22,974	750,000	3.06	2 70
- 34	14,796	18,417	33,213	714.000	4.65	3 07
- 39	16,406	15,179	31,585	579,000	5 46	70.5
- 39	54,695	51,053	105,748	2.849.000	3 72	19.63
- 44	21,056	21,404	42,460	480.000		5 07
- 49	19,474	25,863	45,337	460,000	9.86	5.07
- 54	37,100	40,386	77,486	452,000	17.14	3.45
- 59	37,045	60,540	97,585	439,000	22.23	11.66
- 64	-	59,777	666,76	343,000	28.57	1.23
- 64	/	207,970	360,867	2,174,000	16.60	43.11
- 69 -	39,171	59,879	99,050	293,000	33.81	11 83
- 74	35,626	43,160	78,786	223,000	35,33	9.4]
6/ -	20,643.	28,394	49,037	157,000	31.23	5 86
- 84	15,200	16,310	31,510	000.86	32, 15	3.76
And the second of the second of the second	13,047	9,533	22,630	73,000	31.00	07.6
And the second s	123,637	157,326	281,013	844,000		33 67
FOTAL (T)						
ALL AUES	381,000	456,000	837,000	8,501,000	9.85	
			T	1221	20.0	

The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario, Volume I, Executive Summary. Prepared for the Ontario Ministry of Health, July 1981. Source:



TABLE 2

SEX AND AGE DISTRIBUTIONS

	AGE GROUP				ROW TOTAL
Male	1-19 17,300 8.3 52.7	20-39 23,100 11.1 44.6	40-65 103,100 49.4 46.8	65+ 65,000 31.2 43.2	208,500
Female	15,600 6.3 47.3	28,700 11.6 55.4	117,300 47.5 53.2	85,500 34.6 56.8	246,900 54.2
Column Total:	32,900 7.2	51,700 11.4	220,300	150,500 33.0	455,400 100.0

Source: op cit, Volume IV: Data Analysis



TABLE 3

### EDUCATIONAL LEVEL

Education	Number of Handicapped People	% Of Applicable Handicapped Population
No schooling	4,000	0.9
Pre-school	4,600	1.0
Grade 5	33,900	7.5
Grades 5-8	131,600	29.1
Grades 9-11	130,100	28.8
Grades 12-13	80,000	17.7
Technical or trade school	17,500	3.9
Community College	22,300	4.9
University (Undergraduate)	8,700	1.9
University (Graduate)	11,500	2.5
University (Post-graduate)	7,700	1.7
Total:	451,900	100.0



TABLE 4

MARITAL STATUS AND SEX

Row Total 207,700 46.0	243,800	451,500
Consnon-law Union 700 0.3	10,00	16.00
Widowed 11,800 5.7 16.5	. 59,800 24.5 83.5	716,00
Divorced 29,00 1.4 21.5	10,00 4.3 78.5	133.00 3.0
Separated 45,00 2.2 43.1	59,00 2.4 56.9	104,00
Married 155,700 75.0 53.4	135,900 55.7 46.6	291,600 64.6
<pre>\$\text{single} *(count) 32,100 *(row \(\circ{x}\) 15.5 \(\circ{x}\) *(col \(\circ{x}\) 51.1</pre>	30,800 12.6 48.9	62,900
Sex Male *(cou *(ruv *(col	Feind Je	Column Total

the relative percent of the column total at the bottom of each column. side. The third number in each cell (the column percent) represents \* The crosstabs in this report are presented in the following format: The first figure appearing in each cell of the crosstabs represents relative percent for each cell of the row total to the right hand The second number in each cell (the row percent) represents the the actual number of respondents in that group (Count).

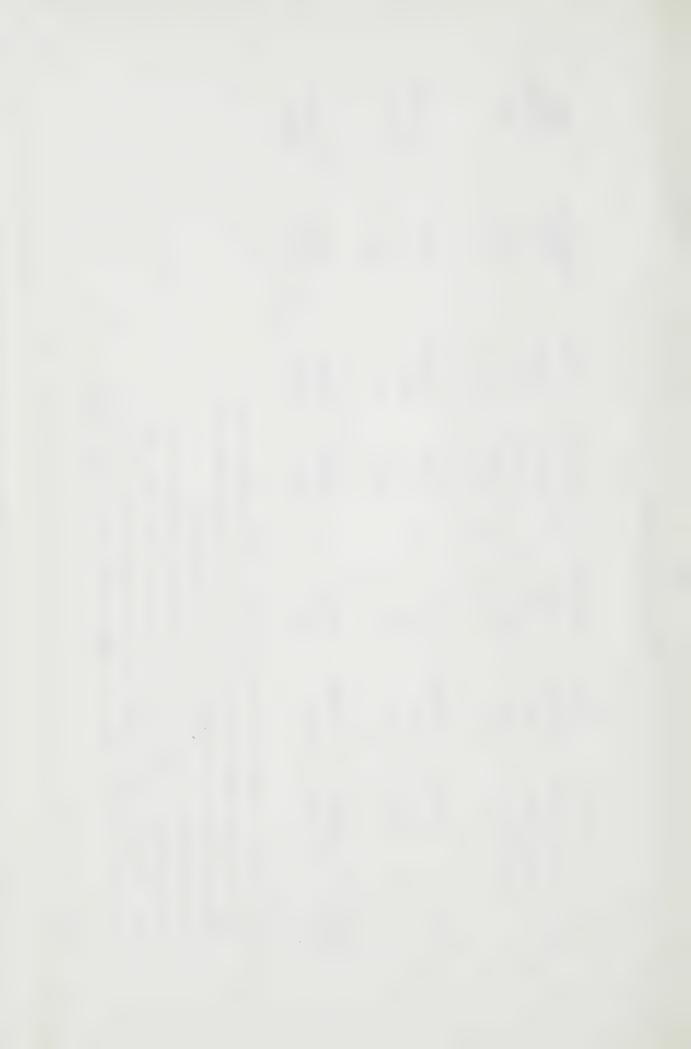


TABLE 5

RELATIONSHIP TO HEAD OF HOUSEHOLD

Relationship	Frequency	Percentage
	0.600	2.1
HUSBAND	9,600	
WIFE	135,200	29.7
SON	23,500	- 5.2
DAUGHTER	21,800	4.8
SON-IN-LAW	200	9.1
FATHER	1,100	0.2
MOTHER	6,900	1.5
FATHER-IN-LAW	1,500	0.3
MOTHER-IN-LAW	5,400	1.2
BROTHER	1,200	0.3
SISTER	800	0.2
BROTHER-IN-LAW	2,400	0.5
GRANDCHILD	300	0.1
GRANDPARENT	300	0.1
NIECE	500	0.1
UNCLE	100	0.0
FOSTER CHILD OR WARD	200	0.0
LODGER	2,300	0.5
HOUSEKEEPER	1,000	0.2
HEAD OF HOUSE	236,200	51.9
OTHER	4,800	1.0
TOTAL	455,300	100.0



TABLE 6

### PERSONAL INCOME

INCOME STEP		FREQUENCY	PERCENTAGE
No Income		86,200	19.8
\$1 - 5,000		166,300	38.3
\$5,000 - 10,000		77,800	17.9
\$10,001 - 15,000		48,900	11.3
\$15,001 - 20,000		22,200	5.1
\$20,001 - 25,000		17,400	4.0
\$25,001 - 30,000		9,000	2.1
\$30,001 - 35,000		2,200	0.5
\$35,001 - 40,000		1,700	0.4
MORE THAN \$40,000		3,000	0.7
	TOTAL:	434,800	100.0

Source: op cit

TABLE 7

### OTHER (FAMILY) INCOME

INCOME STEP		FREQUENCY	PERCENTAGE
No Income		108,100	26.6
\$1 - 5,000		81,400	20.1
\$5,001 - 10,000		59,200	14.6
\$10,001 - 15,000		52,700	13.0
\$15,001 - 20,000		39,600	9.8
\$20,001 - 25,000		27,400	6.8
\$25,001 - 30,000		13,500	3.3
\$30,001 - 35,000		9,400	2.3
\$35,001 - 40,000		7,100	1.7
MORE THAN \$40,000		7,400	1.8
	TOTAL:	405,800	100.0



TABLE 8

# REGIONAL DISTRIBUTION OF THE HANDICAPPED IN ONTARIO

REGION		FREQUENCY	PERCENTAGE
Central		175,300	38.4
East		64,400	14.1
North		42,400	9.3
South		77,700	17.0
West		96,500	21.1
	Total:	456,300	100.0

Source: op cit

# TABLE 9

### RURAL/URBAN DISTRIBUTION

REGION		FREQUENCY	PERCENTAGE
Rural		148,500	32.6
Urban		307,700	67.4
I	otal:	456,300	100.0

Source: op cit

# TABLE 10 CAUSE OF DISABILITY

CAUSE	NUMBER OF HANDICAPPED PEOPLE	% OF APPLICABLE - HANDICAPPED - POPULATION
Birth	29,400	6.7
Illness	55,000	12.5
Getting Older	28,900	6.6
Work Accident	38,300	8.7
Home Accident	20,500	4.6
Travel Accident	18,300	4.2
Genetic-Hereditary	55,100	12.5
Environmental Cause	34,200	7.8
Cause Unknown	160,700	36.5
Total:	440,300	100.0



TABLE 11

### DISABILITY IN ORDER OF PREVELANCE

Condition	%	Frequency
Musculoskeletal	32.0	283,300
Cardiovascular	23.3	205,700
Hearing Impairment	9.1	80,500
Neurological	7.3	64,700
Respiratory	6.9	60,800
Alimentary	6.8	60,200
Endo:meta:nutr.+	5.6	49,300
Sight Impairment	5.2	46,200
Neoplasm	2.6	22,800
Speech Impairment	1.3	11,400
Total Responses:	100.0	884,800

<sup>\*</sup> This figure represents responses <u>not</u> numbers of cases. Respondents were encouraged to report the presence of more than one condition where applicable. Indeed 56% suffer from multiple impairments -- 10% experiencing four or more.

<sup>+</sup> Abbreviation for 'endocrinological-metabolical-nutritional'.



	Row Total	24,000 5.4	43,500	109,300 24.8	30,800	11,200	145,100 33.0	20,600	35,400 8.0	18,200	2,300	440,300
	Cause Unknown	13,500 56.4 8.4	16,600 38.2 10.3	43,800 1 40.1 27.2	10,200 33.1 6.3	5,600 50.1 3.5	46,300 1 31.9 28.8	5,300 25.7 3.3	9,000 25.5 5.6	9,900 54.3 6.1	500 21.1 0.3	160,700 4 36.5
	Environ	1,100 4.5 3.2	500	12,300 11.2 35.8	5,500 18.0 16.2	800 7.6 2.5	6,500 4.5 19.1	400 2.0 1.2	4,300 12.1 12.5	2,200 12.0 6.4	500 23.4 1.5	34,200
IMPAIRMENT	Genetic Hereditary	6,700 27.9 12.2	3,200 7.4 5.8	16,200 14.9 29.5	6,700 21.7 12.2	2,500 21.9 4.5	12,800 8.8 23.3	1,800 8.9 3.3	3,200 8.9 5.7	2,000 11.0 3.6	0	55,100
CAUSE OF	Travel	0	3,300 7.5 17.8	1,600 1.5 8.7	200 0.6 1.1	0	11,400 7.9 62.4	900 4.5 5.1	900 2.5 4.8	0	0	18,300
PRIMARY DISABILITY GROUP AND CAUSE OF	Home Accident	0	3,000 7.0 14.9	1,300 1.2 6.2	200 0.8 1.2	0	13,300 9.1 64.8	2,000 9.8 9.8	600 1.8 3.1	0	0	20,500
DISABILITY	Work	0	2,600 6.0 6.9	1,600	300 1.0 0.8	500 4.2 1.2	29,800 20.5 77.8	1,100 5.3 2.8	2,400 6.8 6.3	0	0	38,300
1	Getting Older	500 2.2 1.8	900 2.2 3.3	9,400 8.6 32.6	300	0	9,500 6.6 32.9	4,700 23.1 16.4	3,100 8.8 10.7	400 2.1 1.3	0	28,900
TABLE 12 -	Illness	2.200 9.0 3.9	6,200 14.3 11.3	20,400 18.7 37.1	4,400 14.3 8.0	900 7.8 1.6	9,600 6.6 17.4	2,100 10.0 3.7	6,800 19.1 12.3	2,200 11.9 3.9	300	55,000
	Birth	0	7,100 16.2 24.0	2,700 2.4 9.1	3,000 9.7 10.2	1,000 8.5 3.3	5,800 4.0 19.9	2,200 10.8 7.6	5,200 14.6 17.5	1,600 8.7 5.4	900	29,400
		Endo-Meta-Nutr	Neurological	Cardiovascular	Respiratory	Neoplasm	Musculoskeletal	Sight Impairment	Hearing Impairment	Alimentary	Speech Impairment	Column Total:

Source: op cit

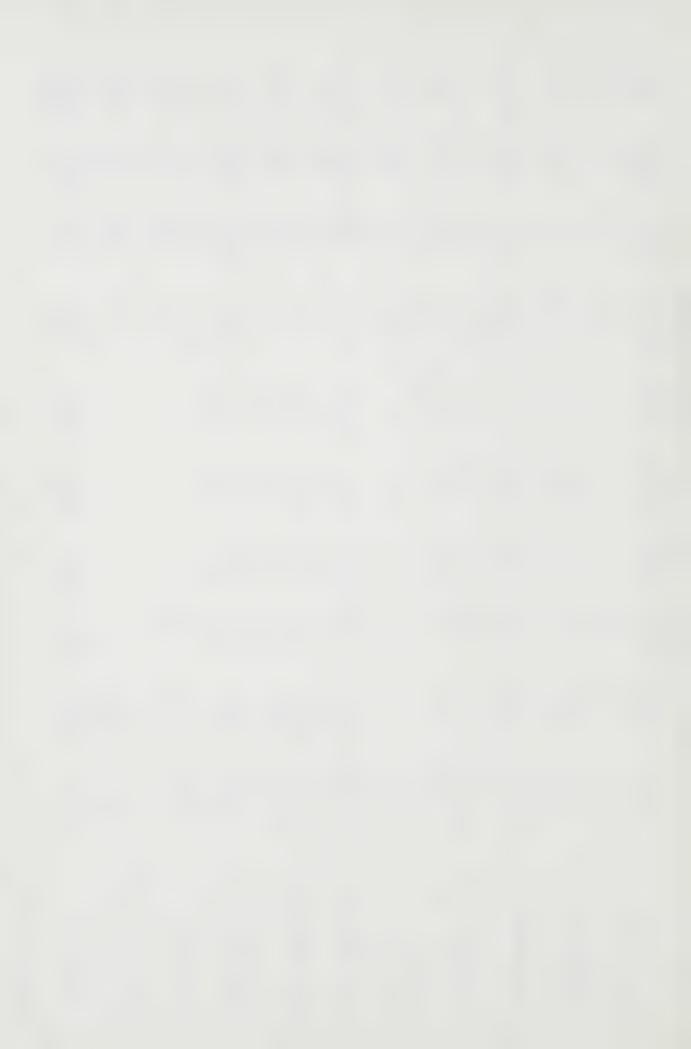


TABLE 13

# NUMBER OF MEDICAL IMPAIRMENTS PER RESPONDENT

<u>IMPAIRMENTS</u>		% OF APPLICABLE HANDICAPPED POPULATION
One		43.1
Two		29.3
Three		17.5
Four		10.0
	TOTAL:	100.0

Source: op cit

TABLE 14

### NUMBER OF FUNCTIONAL LIMITATIONS

NUMBER OF FUNCTIONAL DISABILITIES	NUMBER OF HANDICAPPED PEOPLE	% OF APPLICABLE HANDICAPPED POPULATION
1	163,400	35.8
2	124,100	27.2
3	84,900	18.6
4	82,300	18.0
5	1,200	0.3
6	300	0.1
TOTAL:	456,300	100.0



TABLE 15

## RESPONDENT PERCEPTION OF DEGREE OF DISABILITY

DEGREE OF DISABILITY		FREQUENCY	PERCENTAGE
Mild		44602	11.4
Moderate		202377	51.9
Severe		143322	36.7
Missing		24849	missing
	TOTAL	415179	100.0

Note: Due to large or fractional weights, some frequencies may be in error as much as 28.9.

Source: op cit, Preliminary Data Analysis, February, 1981.



TABLE 16

COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO:

DISABLED AND NON-DISABLED COMMUNITIES

Category	Disabled	Non-	Disabled
		Month A	nnual Averages
	*	Nov.'79*	1980**
(#)			
Population (15 +)	257,971	6,478,000	6,535,000
Labour Force	160,544	4,308,000	4,366,000
Employed	112,865	4,045,000	4,066,000
Unemployed	47,679	263,000	300,000
(%)			
Participation Rate	62.2	66.5	66.8
EPR †	43.8	62.4	62.2
Unemployment Rate	29.7	6.1	6.9

<sup>\*</sup> The month in which the sample frame was selected.

Source: (1) Data re the Physically Disabled: Extended Data Analysis on the Handicapped Labour Force of Ontario, prepared for the Ontario Manpower Commission, May 5, 1981.

(2) Data re the Non-disabled: The Labour Force, December 1980, Cat. # 71-001, Statistics Canada.

<sup>\*\*</sup> Annual averages (the general population) for the year during which the data on disabled persons was collected.

<sup>†</sup> Employment-population ratio



TABLE 17

# EMPLOYMENT STATUS BY OCCUPATION (DISABLED)

### Employment Status

Type of Work	Employed	Unemployed	Sectoral * Labour Force
Clerical	15,600	7,700 *	23,300
	13.9	16.1	14.7
Sales	10,100	4,400 9.2	14,500
Service	16,900	5,200	22,100
	15.0	10.9	14.0
Farm-Fish-Mine	6,100	900	7,000
	5.4	1.8	4.4
Manual Labour	9,300	7,300	16,600
	8.3	15.3	10.5
Semi and	19,400	7,300	26,700
Skilled Trade	17.3	15.3	17.0
Transportation	3,300	2,700	6,000
	2.9	5.6	3.8
lst Level	5,800	800	6,600
Supervisor	5.2	1.7	4.2
Teaching	3,600	2,600	6,200
	3.2	5.4	3.9
Scientific and Technical	6,800 6.1	2,300 4.8	9,100 5.7
Social and	3,100	400	3,500
Artistic	2.8	0.8	
Executive	10,900	1,100	12,000 _ 7.6
Managerial	9.7	2.4	
Other	1,600	3,200	4,800
	1.4	6.8	3.0
Column Total:	112,800	47,600	158,400
	100.0	100.0	100.0

### \* Estimates

Note: (i) Employed column includes persons over 65 years.

(ii) Numbers are rounded to the nearest hundred.

Source: (1) Employed: Preliminary Report on the Unemployed
Handicapped Populations in Ontario, April 1981.

- (2) Unemployed Percentages: Survey of Special Populations.

  Preliminary Data Analysis, February 1981.
- (3) Estimates: Derived from Extended Data Analysis, May 1981.



TABLE 18

Comparative Unemployment Rates by Occupation, Ontario:

Disabled and Non-Disabled Labour Forces

01	Unemploymen	t Rate	
Occupational Category	Non-disabled	Disabled*	Difference
Managerial	2.3%	9.5%	+ 7.2%
Teaching	3.1	41.7	+ 38.6
Clerical	6.3	33.0	+ 26.7
Sales	5.3	30.3	+ 25.0
Service	9.5	23.5	+ 14.0
Transportation	7.2	44.7	+ 37.5

### \* Estimates

Source: (1) Data re: the Non-disabled: The Labour Force, Dec. 1980

(2) Data re: the Physically Disabled: Derived from Extended

Data Analysis, May 1981



EMPLOYMENT STATUS BY AGE AND SEX

TABLE 19

	Part	Participation Rate	are	Employme	Employment-Population Ratio	on Ratio	n	Unemployment Rate	Rate
Group	Non- disabled	Disabled	Difference	Non- disabled	Disabled	Difference	Non- disabled	Disabled	Difference
15-24 years	70.1%	55.9%	- 14.2%	61.4%	32.4%	- 29.0%	12.4%	42.1%	+ 29.7%
Male	73.3	51.9	- 21.4	63.9	32.3	- 31.6	12.9	37.7	+ 24.8
Female	8.99	59.5	- 7.3	58.8	32.4	- 26.4	11.9	45.6	+ 33.7
25-44 years	82.0	9.62	- 2.4	77.5	52.9	- 26.6	5.5	33.5	+ 28.0
Male	8.96	95.8	- 1.0	92.3	64.7	- 27.6	4.7	32.5	+ 27.8
Female	67.5	63.8	- 3.7	63.0	41.5	- 21.5	6.7	34.9	+ 28.2
45-64 years	68.3	9.67	- 18.7	65.5	35.2	- 30.3	4.1	28.9	+ 24.8
Male	84.1	65.8	- 21.6	84.2	50.4	- 33.8	3.6	23.4	+ 19.8
Female	50.1	27.6	- 22.5	9.74	20.8	- 26.8	6.4	48.4	+ 43.5

Source: (1) Data re: the Non-Disabled: The Labour Force, Dec. 1980

Data re: the Physically Disabled: Extended Data Analysis, May 1981 (2)



TABLE 20

EMPLOYMENT AND PARTICIFATION STATISTICS

BY AGE CLASS (MALES)

FOTAL POPULAT 7,050	N 1	UR FORCE EMPLOYED 4,832 <sup>1</sup> ,580 <sup>3</sup> 3,8	LABOUR FORCE  10TAL EMPLOYED UNEMPLOYED  2,653 4,832 1,580 3,823 1,073 4,832	PARTICIPATION RATE (X) 37.6   ST 0	UNEMPLOYED RATE (%) 40.4] 37.7	EMPLOYEU POPULATION RATIO (X) 22. 4] 32.3
	91-80	1,429 3, 3,583 19;545,593 28,	2,179     1,429     1,50     1,623       5,441     3,583     1,859       6,808     19;545,593     28,942     9,396	96.3 88.7 88.7	34.4 34.2 17.8 32.5	63.1 58.4 72.8-64.7
86,422	ري هاري ه	4,690 5,68 <u>1</u> 8,25 <u>5</u> 10,212 <sub>56</sub>	2,848 3,474 2,533 3,621	95.1	37.8 37.9 23.5	59.0
26,743 19,018 56,8 30,059 13,242 125,942* 90,655	2 2 S	56,889,659 10,43 <u>1</u> 66,112	2	71.17	22.9	54.8

\*Missing data (refusal to give age) precludes computation or yields percentages that are probably high. Note that about 5% of respondents refused to give their age.

Source: Extended Data Analysis, May 1981



TABLE 21

EMPLOYMENT AND PARTICIPATION STATISTICS
BY AGE CLASS (FEMALES)

EMPLOYED

POPULATION RATIO	35.0 32.4	31.8		50.6	23.3 20.8	10.5	26.6
UNEMPLOYED RATE (%)	26.2 45.6	37.7	28.9	33.3	43.1 48.4	34.9	38.3
PARTICIPATION RATE (%)	47.4 59.5	58.5	51.5	51.7	40.9 27.6	16.1	43.1
UNEMPLOYED	667 2,802		3,923 2,790 1,133	2,687]	8,401 24,922,179 18,765 3,622 12,055	1,491	21,831
LABOUR FORCE EMPLOYED	2,550_6,1501,883]3,349 3,600] 1,466	1,019	2,790	5,392j 5,522j	24,922,179 18,	2,784	35,106
TOTAL		1,874	3,923	8,079	8,401	4,275	56,936
TOTAL POPULATION	5,385 10,331 4,946	3,205	7,623*	10,664*]	20,532* 90,430	26,605	132,032*
AGE CLASSES	15 - 19 20 - 24 15-24	25 - 29 30 - 34 25-44	35 - 39	40 - 44	50 - 54 45-64	60 - 64	lotal

\*Missing data (refusal to give age) may lead to percentages that are too high. Note that approximately 5% of respondents refused to give their age.



TABLE 22

EMPLOYMENT AND PARTICIPATION STATISTICS BY AGE CLASS

TOTAL (MALES AND FEMALES)

Toral  Age Classes Population 15 - 19 12,435	Total 5,203	Employed 3,463	ed	Unemployed	Rate (2)		Population Ratio (X) 27.8 3.2 4
7,209 19,644		2,895	6,3	58 2,885 4,625	80.2 _ 53.9	49.9	40.2
9,338	7,315 478 12,898-48,908	4,602	32,5	2,,113	73.9- 79.6	27.2- 33.5	53.8 52.9
14,389		7,480		1,981	1.61	34.7	52.0
20,293	17,234	11,073		(191'9	84.9	35.7	54.6 [
24,516	17,328	13,777		3,550	70.7		
38, 283-176, 852	852 22,233 87,702	16,991	14,991 - 62,322	7,243 - 25,379	58.1 49.6	32.6- 28.9	39.2- 35.2
57,389	30,624	20, 339		10,284	53.4	33.6	35.4
56,664	17,517	13,215		4,302]	30.9	24.6	23.3
257,974	147,591	101,218		46,374	57.2	31.4	39.2

Source: op eft



TABLE 23

## COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO: DISABLED AND NON-DISABLED COMMUNITIES YOUTH (15-24)

Category	Disabled	Non-disabled	
		Month	Annual Average
	·	Nov. '79	1980
(#)			
Population	19,644	1,616,000	1,618,000
Labour	10,982	1,100,000	1,134,000
Employed	6,358	891,000	993,000
Unemployed	4,625	119,000	141,000
(%)			
Participation Rate	55.9	68.1	70.1
EPR	32.4	60.7	61.4
Unemployment Rate	42.1	10.8	12.4

Source: (1) Data re: the Physically Disabled: Extended Data Analysis,
May 1981

(2) Data re: the Non-disabled: The Labour Force, Nov. 1979, Cat. # 71-001, Statistics Canada

The Labour Force, Dec. 1980



COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO:

ADULT (25 +)

DISABLED AND NON-DISABLED COMMUNITIES

TABLE 24

Category	Disabled *		Non-disabled		
		Month	Annual Average		
		Nov. '79	1980		
(#)					
Population	238,330	4,862,000	4,917,000		
Labour Force	136,609	3,208,000	3,232,000		
Employed	94,046	3,064,000	3,073,000		
Unemployed	41,749	144,000	159,000		
(%)					
Participation Rate	57.3	66.0	65.7		
EPR	39.5	63.0	62.5		
Unemployment Rate	30.5	4.5	4.9		

<sup>\*</sup> Missing data (refusal to give age) yields percentages that may be high. Note that about 5% of respondents in the adult population refused to give their age.



TABLE 25

COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO

DISABLED AND NON-DISABLED COMMUNITIES (MALES)

Category	Disabled	Non-disabled		
		Month	Annual Average	
		Nov. 179-	1980	
(#)				
Population	125,942	3,162,000	3,189,000	
Labour Force	90,655	2,513,000	2,548,000	
Employed	66,112	2,386,000	2,389,000	
Unemployed	24,543	127,000	159,000	
(%)				
Participation Rate	71.9	79.6	79.9	
EPR	52.5	75.5	74.9	
*Unemployment Rate	27.1	5.0	6.2	



COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO:

DISABLED AND NON-DISABLED COMMUNITIES (FEMALES)

Category	Disabled	Non-Disabled		
		Month	Annual Average	
		Nov.'79	1980	
(#)				
Population (15 +)	132,032	3,316,000	3,346,000	
Labour Force	56,936	1,795,000	1,818,000	
Employed	35,106	1,659,000	1,677,000	
Unemployed	21,831	136,000	141,000	
(%)				
Participation Rate	43.1	54.1	54.3	
EPR	26.6	50.0	50.1	
Unemployment	38.3	7.6	7.7	



TABLE 27

# COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO: DISABLED AND NON-DISABLED COMMUNITIES ADULT MEN (25 +)

Category	Disabled	Non-Disabled		
		Month	Annual Average	
		Nov.'79	1980	
(#)				
Population	116,629	2,345,000	2,369,000	
Labour Force	85,823	1,933,000	1,947,000	
Employed	62,289	1,865,000	1,866,000	
Unemployed (#)	22,720	68,000	82,000	
Participation Rate	73.6	82.4	82.2	
EPR	53.4	79.5	78.8	
Unemployment Rate	26.5	3.5	4.2	



TABLE 28

## COMPARATIVE LABOUR FORCE STATISTICS, ONTARIO: DISABLED AND NON-DISABLED COMMUNITIES

#### ADULT WOMEN (25 +)

Category	Disabled		Non-Disabled
		Month	Annual Average
		Nov.'79	1980
(#)			
Population	121,701	2,517,000	2,548,000
Labour Force	50,786	1,275,000	1,284,000
Employed	31,757	1,200,000	1,207,000
Unemployed	19,029	75,000	77,000
(%)			
Participation Rate	41.7	50.7	50.4
EPR	26.1	47.7	47.4
Unemployment Rate	37.5	5.9	6.0



TABLE 29:

EMPLOYMENT STATUS BY EDUCATIONAL ATTAINMENT

Education Employment Status Row				
Attained	Employed	Unemployed	Other	Total
No Schooling	200 4.4 0.2	900 21.9 1.8	2,900 73.7 1.0	4,000 0.9
Pre-School	0	0	4,600 100 .0 1.6	4,600
Grade 5	2,200 6.6 2.0	1,700 5.1 3.6	30,000 88.3 10.2	33,900 7.5- 66.4
Grades 5-8	24,000 18.2 21.8	13,300 10.1 27.8	94,300 71.7 32.1	131,600
Grades 9-11	34,700 26.7 31.5- 72.7	13,600 10.4 28.5- 78.5	81,800 62.9 27.8-76.3	130,100
Grades 12-13	21,400 26.8 19.4	10,400 13.0 21.7	48,200 60.3 16.4_	80,000 17.7
Technical Trade School	6,400 36.8 5.9	2,100 11.9 4.4	9,000 51.2 3.0	17,500 3.9
Community College	8,300 37.3 7.5	1,200 5.2 2.4	12,800 57.5 4.4	22,300
University Undergraduate	3,400 38.7 3.1	1,200 13.4 2.5	4,200 47.9 1.4	8,700
University Graduate	5,300 45.9 4.8 11.7	1,800 15.8 3.8 9.7	4,400 38.3 1.5-3.5	11,500
University Post-Graduate	4,200 54.9 3.8	1,600 21.1 3.4	1,800 24.0 0.6	7,700
Column Total	110,100 24.4	47,700 10.6	294.100 65.1	451,900 100.0

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, prepared for the Ontario Manpower Commission, April 1981.



TABLE 30

EDUCATIONAL ATTAINMENT AND EMPLOYMENT

STATUS, ONTARIO 1980 ANNUAL AVERAGES

Education	Employment Status			
Attained	Employed	Unemployed	Inactive	Population(15 +)
	1980	1980	1980	1980
0 - 8 Years	14.7%	16.3%	33.3%	20.9%
High School	53.9	65.0	49.7	52.9
Some Post-Secondary	9.1	7.3	5.6	8.2
Post-Secondary Certificate	10.9	7.0	6.2	9.1
University Degree	11.5	4.3	4.2	8.8
Total:	100.0	100.0	100.0	100.0

Source: The Labour Force, Dec. 1980



TABLE 31

UNEMPLOYMENT RATES BY EDUCATIONAL ATTAINMENT FOR

DISABLED AND NON-DISABLED GROUPS

Disabled		Non-Disabled	
Education Attained	Unemployment Rate	Education Attained	Unemployment Rate
2 1 2 1	26 /9		7.7%-
Grade School	36.4%	Grade School	1.16-
High School	32.7%	High School	8.2%
Technical Trade School	24.7%	Some Post-Secondary	5.5%
Community College	12.6%	Post-Secondary	4.5%
University Degree (All types)	26.3%	Certificate	
(ALL Cypes)		University Degree	2.7%

Source: (1) Data re: the Physically Disabled: Derived from Preliminary
Report on the Unemployed
Handicapped Population
in Ontario, April 1981.

(2) Data re: the Non-disabled: The Labour Force, Dec. 1980.



TABLE 32

EMPLOYMENT STATUS BY REASON DID NOT CONTINUE

EDUCATION

#### Employment Status

Reasons	Employed	Unemployed	Other	Row Total
No Special Reason	27,200 32.7 24.2	10,900 13.1 23.0	44,900 54.1 15.8	83,600 18.7 . 35.8
Achieved Goal	27,400 36.2 24.3	10,100 13.4 21.3	38,100 50.4 13.4	75,600
Problems - Program	0	1,000 25.8 2.1	2,900 74.2 1.0	3,900
Problems - Get There	1,000 17.2 0.9	200 4.0 0.5	4,700 78.8 1.6	5,900 1.3
Had to Work	28,600 19.5 25.4	12,100 8.3 25.6	106,000 72.2 37.4	146,700 33.1
Structure of Building	0	0	200 100.0 0.1	200
Dissatisfied With Program	1,500 24.5 1.4	2,200 35.5 4.7	2,500 40.0 0.9	6,300
Financial Problems	8,700 23.4 7.7	3,100 8.3 6.5	25,500 68.3 9.0	37,300 8.4
Still in School	4,100 18.6 3.7	500 2.2 1.0	17,600 79.2 6.2	22,200 5.0
Health Problem	4,100 28.3 3.6	3,000 20.7 6.3	7,300 50.9 2.6	14,400
Married .	1,000 12.2 0.9	2,100 24.9 4.5	5,300 62.9 1.9	8,500 1.9
Other	8,800 22.3 7.8	2,100 5.4 4.5	28,400 72.3 10.0	39,300
Column Total	112,500 25.4	47,500 10.7	283,500 63.9	443,400 100.0

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.



TABLE 33

EMPLOYMENT STATUS BY COMMUNITY TYPE

Employment	Communi	Community Type		
Status	Rural	Urban	Row Total	
Employed	33,600 * 29.8 ** 22.6 ***	79,200 70.2 25.8	112,900 24.7	
Unemployed	14,300 30.1 9.6	33,300 69.9 10.8	47,700 10.4	
Other	100,600 34.0 67.7	195,100 66.0 63.4	295,700 64.8	
Column Total	148,600 32.6	307,700. 67.4		

<sup>\*</sup> All numbers presented in this table have been rounded to the nearest hundred.

<sup>\*\* 29.8%</sup> is the **rew** total representing the share of employed persons who reside in rural locales.

<sup>\*\*\* 22.6%</sup> is the column total representing the percentage of rural residents who are employed.



TABLE 34

#### PREVIOUS EMPLOYMENT AMONG THE UNEMPLOYED

Previous Employment	Frequency	Percentage
No	3,100	6.4
Yes	45,700	93.6
Missing	200	Missing
Not Applicable	407,200	Missing
Total:	415,179	100.0

Source: The Sociodemographic and Need-Related Characteristics of the Physically Disabled in Ontario, Volume IV:
Data Analysis, July 1981.



TABLE 35

LENGTH OF TIME UNEMPLOYED FOR

UNEMPLOYED HANDICAPPED

Time Unemployed	Number	% of Total
Less than 6 months	9,708	19.9
6 - 12 months	2,970	6.1
1 - 2 years	10,396	21.3
3 - 4 "	7,898	16.2
5 - 6 "	5,935	12.1
7 years or more	11,967	24.5
Total:	48,874	100.0

Source: Extended Data Analysis on the Handicapped Labour Force of Ontario, May 1981.



TABLE 36

### AVERAGE DURATION OF UNEMPLOYMENT ONTARIO 1979 AND 1980

Group .	Duration of Unemployment Annual Averages			
	1979	1980		
All groups	14.2	13.9		
Men	14.2	13.9		
Women	14.2	13.9		
15-24 years	11.4	11.6		
25-44 years	15.7	14.8		
45 years and over	18.9	18.6		
23				

#### \* Weeks

Source: (1) 1979 Data: The Labour Force, Dec. 1979

(2) 1980 Data: The Labour Force, Dec. 1980



TABLE 37

FULL-TIME AND PART-TIME EMPLOYMENT BY SEX AND AGE

1980 ANNUAL AVERAGES: ONTARIO

Group	Unemployed	Employed				
·	%	Full-Time %	Part-Time %	Labour Force		
Male (All)	6.2	87.7 67.4	6.2	2,548 601		
25-44 45-plus	4.7	94.5	0.9	1,172		
Female (All)	7.8	69.6	22.7	1,818		
15-24 25-44	6.7	74.3	27.6 19.0	533 832		
45-plus Total	6.9	71.5	23.6	453		
(Both Sexes)  Total Disabled	29.7	50.9	19.4	157,408		

Source: (1) Data re: the Non-disabled: The Labour Force, Dec. 1980

(2) Data re: the Physically Disabled: Derived from Extended

Data Analysis on the Handicapped
Labour Force of Ontario, May 1981.



TABLE 38

EMPLOYMENT STATUS BY PERSONAL INCOME

Personal	Employmen			
Income *	Employed	Unemployed	Other	Row Total
No Income	1,000 1.2 0.9	10,600 12.3 23.2	74,600 86.5 26.5	86,200 19.8
\$1,000 5,000	18,600 11.2 17.4 35.1	18,200 10.9 39.7 -81.0	129,600 77.9 45.9	166,300 38.3
\$5,001 10,000	18,000 23.2 16.8	8,300 10.7 18.1	51,500 66.2 18.3	77,800 17.9
\$10,001 15,000	26,600 54.4 24.9	5,300 10.8 11.5	17,000 34.8 6.0	48,900 11.3
\$15,001 20,000	16,100 72.2 15.0	1,500 6.7 3.2	4,700 21.1 1.7	22,200
\$20,001 25,000	13,700 78.6 12.8	200 1.0 0.4	3,600 20.4 1.3	17,400 4.0
\$25,001 30,000	6,600 72.5 6.1	1,600 17.4 3.4	900 10.1 0.3	9,000 2.1
\$30,001 35,000	2,000 92.1 1.9	200 7.9 0.4	0	2,200
\$35,001 40,000	1,700 100.0 1.6	0	00	1,700
More than \$40,000	2,800 94.1 2.6	0	200 5.9 0.1	3,000 0.7
Column Total	107,100 24.6	45,700 10.5	282,000 64.9	434,800 100.0

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.

<sup>\*</sup> Broad income steps may be accompanied by an inflationary tendency. For example, it is possible that the majority of cases located in the \$5,001.00 - \$10,000.00 income bracket actually receive earnings at the lower end of this range. If broken out more finely it may be possible that 81.0% of the unemployed received a personal income of \$5,001.00 or less.



TABLE 39
PERSONAL INCOME BY FULL TITE EMPLOYMENT STATUS AND GROUP

Hulte	PERSONAL INCOME				ACE	AGE CLASS						
Halle		91 – 31	20 - 24		1		77 -	45 -	1	1	<b>79 - 09</b>	Total (Z)
Hale         260         175         477         -			i		ŧ	1	ı	1	ı	318	99	318 (0.6)
Halle         175         477         -         -         304         609         159         -         -         807         2,532           Halle         -         533         -         -         -         871         699         354         470         -         2,927           Halle         260         173         583         485         556         608         48         236         573         375         3,886           Halle         -         -         1,110         1,321         485         1,174         1,336         3,983         2,826         13,611           Halle         -         -         1,110         1,321         405         1,173         1,476         1,316         3,983         2,826         13,611           Halle         -         -         1,110         1,321         405         1,376         1,378         1,377         2,877         988         11,246           Halle         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	Female		1	į	ŧ	B	ŝ	ı	8	ı	ı	- (0.0)
Halte         260         173         583         485         556         608         48         236         375         3,886           Halte         260         173         583         485         556         608         48         236         375         3,886           Halte         207         154         475         380         713         1,086         1,142         1,330         382         690         6,558           Halte         -         -         1,110         1,321         405         1,173         1,476         1,316         3,983         2,026         13,611           Halte         -         -         1,110         1,321         405         1,173         1,476         3,983         2,026         13,611           Halte         -         -         369         1,339         892         -         888         819         1,747         830         6,884           Halte         -			411	ī	1	304	609	159	1		807	2,532 (4.7)
Halle         260         175         577         583         485         556         608         48         236         375         375         3,886           malle         207         154         475         380         713         1,086         1,142         1,330         382         690         6,558           Malle         -         -         1,110         1,321         405         1,173         1,476         1,316         3,983         2,826         13,611           malle         -         -         369         1,339         892         -         888         819         1,747         830         6,884           Mule         -         205         508         1,833         1,191         890         1,378         1,377         2,877         988         11,246           Mule         -         -         -         -         -         -         -         -         -         -         -         -         646           Mule         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	10.000		533	1	1	1	871	669	354	470	ı	2,927 (15.1)
Male         207         154         475         380         713         1,086         1,142         1,330         382         690           Male         -         -         1,110         1,321         405         1,173         1,476         1,316         3,983         2,826         1           Male         -         -         369         1,339         892         -         888         819         1,747         830           Male         -         205         508         1,833         1,191         890         1,378         1,377         2,877         988         1           Male         -			175	577	583	485	556	809	87	236	375	3,886 (7.1)
Male         -         -         1,110         1,321         405         1,173         1,476         1,316         3,983         2,826           male         -         -         369         1,339         892         -         888         819         1,747         830           Male         -         205         508         1,833         1,191         890         1,378         1,377         2,877         988           Male         -         <	Female		154	475	380	713	1,086	1,142	1,330	382	069	6,558 (33.7)
male         -         -         369         1,339         892         -         888         819         1,747         830         6,884           Male         -         205         508         1,833         1,191         890         1,378         1,377         2,877         988         11,246           Male         -         -         -         -         -         -         -         -         646           Male         -         -         908         658         1,765         821         2,055         2,531         1,192         638         10,767           Male         -         -         -         -         -         -         -         -         -         -         -         -         -         646           Male         -         -         908         658         1,765         821         2,655         2,531         1,192         638         10,767           Male         - <td></td> <td></td> <td>ı</td> <td>1,110</td> <td>1,321</td> <td>405</td> <td>1,173</td> <td>1,476</td> <td>1,316</td> <td>3,983</td> <td>2,826</td> <td>13,611 (25.0)</td>			ı	1,110	1,321	405	1,173	1,476	1,316	3,983	2,826	13,611 (25.0)
Male - 205 508 1,833 1,191 890 1,378 1,377 2,877 988 11,246 ( 487 - 159 - 646  Male 908 858 1,765 821 2,055 2,531 1,192 638 10,767 ( 110 317 348 - 1,597	Female		ę	369	1,339	892	ŧ	888	819	1,747	830	6,884 (35.4)
Male 487 - 159 646  Male 908 658 1,765 821 2,055 2,531 1,192 638 10,767 ( amale 821 110 317 348 - 1,597	Male ,001 - 20,000		205	808	1,833	1,191	890	1,378	1,377	2,877	988	11,246 (20.7)
Male 908 858 1,765 821 2,055 2,531 1,192 638 10,767 (	Female		1	1	1	9	487		159	İ	ı	646 (3.3)
1,597	Male 3,001 - 25,000		1	806	858	1,765	821	2,055	2,531	1,192	638	10,767 (19.8)
	Female		ī	ı	821	i	1	110	317	348	ı	1,597 (8.2)



Table 19 (Cont'd)

	7)	.5)		.8)	.5)	(0.0)	(0.1	(0.6)	
	Total (%)	5,700 (10.5)		715 (3.8)	1,916 (3.5)	0) -	4,374 (8.0)	110 ((	54,350
	<b>79 - 09</b>	2,009		1	232	9	272	a	
	55 - 59	510		202	691	1	803	Ę.	
	50 - 54	1.715		\$	811	1	1,184	ŝ	
	45 - 49	573		1	260	ı	785	ı	
	<b>77</b> - <b>77</b>	528		8	175	ī	695	ı	
	35 - 39		ţ	ı	141	1	ŧ	110	
ASS	30 - 34	9000	507	512	128	ţ	999	ţ	
AGE CLASS	25 - 29		101		î	1		ě	
	20 - 24	1	1	1	t	ì	l	1	
	91 - 31		1	1		١	1	1	
PEKSONAL INCOME			Male	- 30,000 Female	30,001 - 35, Male	30,001 - 35,000 Female	Male	35,000 + Female	

Source: Extended Data Analysis on the Handicapped Labour Force of Ontario,



TABLE 40

PERSONAL INCOME BY PART TIME EMPLOYMENT STATUS AND AGE GROUP

	<u>Total</u> x 155 (1.7)	542 (3.8)	2,780 (30.7)	8,876 (61.8)	1,214 (13.4)	3,570 (24.9)	2,500 (27.6)	782 (5.4)	1,725 (19.0)	585 (4.1)	568 (6.3)	0
		à	ı	1,192	ı		1,421	72	ιι		366	3
	55 - 59		116	2,109	959	175	918	, .	1,445	1	1	8
	50 - 54	ă	410	277	175	3	1	710	202	B	202	1
	-45 - 49	ı	205	719	96	1,425	ı	\$	ł	410	T	l
	- 44	542	169	1,034	297	1,197	1	1	\$	175	ŧ	
AGE CLASS	35 - 39	and the second s	ı	302	1	197	191	Į	1	age of the state o	1	1
et.	30 - 34	ŧ	i	338	ı	402	ı	I	l	1	I	4
	25 - 29	1	318		ı	175	1	ı	1	l	1	\$
	20 - 24	1	572	611	I	ŀ		1	1	1	ş	
	15 - 19 155	ŧ	066	1,676	9	ı		1		1	l	1
PERSONAL INCOME	Mule	None Female	Male	1 - 5,000 Female	Male	5,001 - 10,000 Female	Nale	10,001 - 15,000 Female	Male	15,001 - 20,000 Female	Male	20,001 - 25,000 Female



	-1			128 (1.4)				
	Total	0	0	128	0	0	0	9,070
	79 - 09	1	ı	ł	1	ı	\$	
	55 - 59	ı	í	128	1	1	ı	
	50 - 54	1		1	ı	ı	1	
	45 - 49	ţ	1	t	I	ł	ŝ	
	77 - 77	ŧ	ı	l	1	I	1	
	35 - 39	ı	ţ	i	t	PD COMPANY OF THE POST OF THE	ŧ	
	30 - 34	1	ţ	1	í	1	l	
	25 - 29	I	ı	li li	1		ı	-
	10 - 13	ı	1	9	1	,	1	
	15 - 19	ı	i	1		8	ſ	
Table 40(Cont'd)	Personal Income	Male	25,001 - 30,000 Female	Male	30,001 - 35,000 Female	Male	35,000 + Female	

Source: op ett



TABLE 41
PERSONAL INCOME BY UNEMPLOYED STATUS AND AGE GROUP

	Total %	3,3// (13.8)	7,211 (36.3)	8,066 (32.9)	9,281 (46.7)	5,459 (22.2)	2,837 (14.3)	4,768 (19.4)	375 ( 1.9)	1,128 (4.6)	ı
	<del>99 - 09</del>	521	1,023	1,319	468	410	5	561	1	ı	1
	55 - 59	542	2,293	930	1,469	726	0	538	205	370	1
	50 - 54	1,026	1,777	934	1,163	1,163	513	159	169	162	1
	45 - 49	ı	169	405	707	1,017	141	935	ı	ŧ	1
	40 - 44	1	1,154	705.	1,098	1,928	436	6.03	1	ł	1
AGE CLASS	35 - 39	202	1	1,333	555	159	578	979	t	175	ŧ
	30 - 34	¥	684	899	869	55	575	492	ŧ	\$	I
	25 - 29	128	ı	988	371	3	485	422	ţ	422	1
	20 - 24	116	1	557	2,024	1	110	11	ŧ	1	1
	15 - 19	841	Ħ	232	556	Į.	t	i	ı	3	1
PERSONAL INCOME		Make	None Female	Male	1 - 5,000 Female	Male	5,001 - 10,000 Female	Male	10,001 - 15,000 Female	Male	15,001 - 20,000 Female



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I.A

PERSONAL INCOME

ACE CLASS

74		(6.0	6.4)					
Total	1	169 (0.9)	1,568 (6.4)	1	1	1	ı	!
79 - 09	ı	1	ı	1	,	1	ı	1
55 - 59	ı	3	1,253	1	1	1	t	1
50 - 54	ţ	3	i	t	ł	1	t	ŧ
45 - 49	ı	. 1	11	1	ŧ	ŧ	ι	i
70 - 44	1	l	238	ţ	t	i	\$	ı
35 - 39	1	ı	t	ı	ī	ı	1	ı
30 - 34	4	169	1	1	1	1	1	ı
25 - 29	ı	ì	l	ı	ŧ	t		t
20 - 24	i	1	7	I	ì	1	1	1
15 - 19	t	i	3	t	ą	t	1	I
	Male 25 000	Female	Male	25,001 - 30,000 Female	Male	30,001 - 35,000 Female	Male	Female

Source: op clt



TABLE 42

Type of Income By Employment Status

Type of Income	Part Time	Full Time	Unemployed	Total (No. of Responses in row)
Public Assist. (Row %)	15,805 (19.4)	35,068 (43.1)	30,486 (37.5)	81,359
Wages and Own Bus.	30,333 (21.4)	80,362 (56.7)	30,961 (21.9)	141,656
Other Personal	15,535 (29.0)	22,699 (42.4)	15,305 (28.6)	53,539
Private Insurance	1,706 (10.1)	3,346 (19.8)	11,860 (70.1)	16,912

Cases Across are validly additive.
Cases Down contain multiple responses (i.e. in up to 4 categories)

Source: op cit

Sources of Income by Employment Status

Responses	Part	Average Response Per Case	<u>Ful1</u>	Average Response Per Case	Unemployed	Average Response Per Case
Public Assist.	18,661	1.18	40,375	1.15	46,568	1.53
Wages and Own Bus.	34,174	1.13	86,434	1.08	35,144	1.14
Other Personal	19,403	1.25	24,233	1.07	16,726	1.09
Private Insurance	1,706	1.0	3,346	1.0	12,142	1.02
Total Responses	73,944		154,388		110,580	
Total Numbers	32,000		81,000		47,000	
Average Responses/ Person in Group	2.31		1.91		2.35	

Cases across are not additive in this instance.

Source: op cit



EMPLOYMENT AND PARTICIPATION STATISTICS

BY DISABILITY GROUP

DISABILITY	TOTAL		LABOUR FORCE		DADTICIDATION	0.00	
GROUP	POPULATION	TOTAL	EMPLOYED	UNEMPLOYED	RATE &	DNEMPL.	EMPL./ POPU. RATIO
Endo-Meta-Nutr.	. 12,951	7,525	6,164	1,361	58.1	18.1	47 6
Neurological	29,863	17,426	12,025	5,401	58.3	31.0	40 3
Cardiovascular	56,842	31,633	23,883	7,750	55.7	24.5	42.0
Respiratory	15,198	9,437	5,265	4,172	62.1	44.2	34.6
Neoplasm	7,338	1,719	508	1,211	23.4	70.4	o 9
Musculoskeletal	94,850	69,170	46,399	22,771	72.9	32.9	48 9
Sight Impair	8,518	3,992	3,002	066	46.9	24.8	35.2
Hearing Impair	20,301	9,466	7,799	1,667	46.6	17.6	38.4
Alimentary	11,141	6,871	4,795	2,076	61.7	30.2	43.0
Speech Impair	676	*691	i	169	1	1	) ; ;
Total	257,971	160,544	112,865	47,679	62.2	29.7	43.8

on the Landicapped Labour Force of Ontario, May 1931. \*
Sample too small to be reliable.
Source: Extended Data Analysis



TABLE 45

## PERCENTAGE POINT DIFFERENCES BETWEEN DISABILITY GROUP AND GENERAL POPULATION EMPLOYMENT AND PARTICIPATION STATISTICS

1980

Group	Percentag	ge Point D	ifference
010dp	Participation Rate	EPR	Unemployment Rate
General Population (Totals)	66.8	62.2	6.9
Disability Group (Differences)			
Endo-Meto-Nutr.	- 8.7	- 14.6	+ 11.2
Neurological	- 8.5	- 21.9	+ 24.1
Cardiovascular	- 11.1	- 20.2	+ 17.6
Respiratory	- 4.7	- 27.6	+ 37.3
Neoplasm	- 43.4	- 55.3	+ 63.5
Musculoskeletal	+ 6.1	- 13.3	+ 26.0
Sight Impair	- 19.9	27.0	+ 17.9
Hearing Impair	- 20.2	- 23.8	+ 10.7
Alimentary	- 5.1	- 19.2	+ 23.3
Speech Impair			
Total	- 4.6	- 18.4	+ 22.8

Source: (1) Data re: the Non-disabled: The Labour Force, Dec. 1980.

(2) Data re: the Physically Disabled: Extended Data Analysis on the Handicapped Labour Force of Ontario, May 1981.



257,973

Extended Data Analysis on the Handicapped Labour Force, May 1981.

Source:

DISABILITY GROUP BY AGE GROUP FOR ALL HANDICAPPED

TABLE 46

# PERSONS BETWEEN 15 AND 65

			3							ı
Total	12,951	29,863	56,842	15,190	7,338	94,850	8,518	20,301	11,141	979
55-65	5,816 (44.9)	7,371 (24.7)	36,603 (64.4)	6,224 (41.0)	4,756 (64.8)	35,119 (37.0)	4,296 (50.4)	9,195 (45.3)	4,247 (38.1)	428
45-55	4,171 (32.2)	7,024 (23.5)	14,408 (25.3)	3,203 (21.1)	1,723 (23.5)	24,208 (25.5)	1,266 (14.9)	3,599 (17.7)	3,195 (28.7)	0 1
35-45	1,133	4,861 (16.3)	4,114 (7.2)	2,090 (13.8)	489	17,789 (18.8)	533	2,003 (9.9)	1,669 (15.0)	0 1
25-35	1,332 (10.3)	5,640 (18.9)	1,046 (1.8)	749	234 (3.2)	12,491 (13.2)	835	2,977 (14.7)	941 (8.4)	551
15-25	499	4,967 (16.6)	671 (1.2)	2,924 (19.2)	136 (1.9)	5,243 (5.5)	1,588 (18.6)	2,527 (12.4)	1,089 (9.8)	0 1
	Endo-Meta-Nutr. (row %)	Neurological (row %)	Cardiovascular (row %)	Respiratory (row %)	Neoplasm (row %)	Musculoskeletal (row %)	Sight Impaired (row %)	Hearing Impaired (row %)	Alimentary (row %)	Speech Impaired (row %)

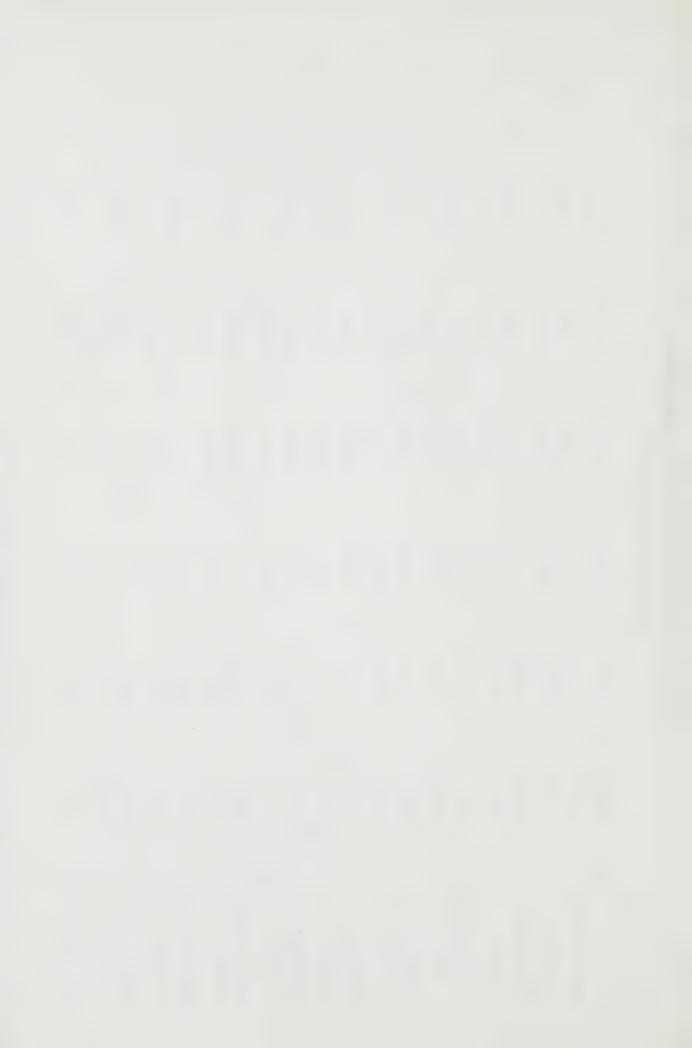


TABLE 47

#### DISABILITY GROUP BY EMPLOYMENT STATUS

Dis	ability oup	Unemployed	Emp Part-Time	loyed Full-Time	Total Labour Force
1.	Endo-Meta-Nutr. (row %)	1,361 (18.1)	2,494 (33.2)	3,670 (48.8)	7,525
2.	Neurological (row %)	5,401 (31.0)	3,348 (19.2)	8,677 (49.8)	17,426
3.	Cardiovascular (row %)	7,750 (24.5)	6,700 (21.2)	17,183 (54.3)	31,633
4.	Respiratory (row %)	4,172 (44.2)	2,561 (27.1)	2,704 (28.6)	9,437
5.	Neoplasm (row %)	1,211 (70.4)	-	. 508 (29.6)	1,719
6.	Musculoskeletal (row %)	22,771 (32.9)	11,530 (16.7)	34,869 (50.4)	69,170
7.	Sight Impair (row %)	990 (24.8)	770 (19.4)	2,226 (55.8)	3,992
8.	Hearing Impair (row %)	1,667 (17.6)	1,615 (17.1)	6,184 (65.3)	9,466
9.	Alimentary (row %)	2,076 (30.2)	1,457 (21.2)	3,338 (48.6)	6,871
10.	Speech Impair (row %)	169 (100.0)	-	-	169
	Total:	47,568	30,481	79,359	157,408

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.



TABLE 48

### DISABILITY GROUP BY EMPLOYMENT STATUS OF EMPLOYED LABOUR FORCE

		Employmen	nt Status	Employed Labour
Dis	ability Group	Part-time	Full-time	Force
1.	Endo-Meta-Nutr.	% 40.5	% 59.5	# 6,164
2.	Neurological	27.8	72.2	12,025
3.	Cardiovascular	28.1	71.9	23,883
4.	Respiratory	48.6	51.4	5,265
5.	Neoplasm	0.0	100.0	508
6.	Musculoskeletal	24.8	75.2	46,399
7.	Sight Impair	25.7	74.3	2,996
8.	Hearing Impair	20.7	79.3	7,799
9.	Alimentary	30.4	69.6	4,795
10.	Speech Impair	-		
				109,834

Source: Derived from -- Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.



TABLE 49

#### DOD Scale Broken Down by Employment Status

Employment Status	<u>Méan</u>	<u>S.D.</u>	<u>n</u>
Part-Time	22.24	4.99	15452
Full-Time	21.26	4.22	67005
Student	22.60	5.30	24159
Homemaker	21.70 -	4.16	81161
Retired	22.52	5.06	136095
Unemployed	27.30	6.58	31358
Multiply Response	23.36	5.47	57758

Source: Survey of Special Populations:
Preliminary Data Analysis, Feb. 1981.

S.D. Standard Deviation

n. Number of cases

<sup>\*</sup> Pre-schoolers not reported due to small cell sizes.



PRIMARY DISABILITY GROUP BY INTEREST IN JOB

AMONG THE UNEMPLOYED

Primary Disability Group	<u>No</u>	Yes	Row Total
Endo-Meta-Nutr	800 54.2 4.6	700 45.8 2.4	1,500 3.3
Neurological	2,600 48.8 14.4	2,800 51.2 9.4	5,400 11.3
Cardiovascular	4,900 65.1 26.6	2,600 34.9 8.9	7,500 15.7
Respiratory	300 6.6 1.4	3,600 93.4 12.3	3,900 8.1
Neoplasm ·	900 71.0 4.7	400 29.0 1.2	1,300 2.5
Musculoskeletal	6,500 28.1 35.5	16,600 71.9 56.3	23,100 48.3
Sight impairment	200 20.7 1.1	800 79.3 2.7	1,000
Hearing impairment	500 27.9 2.5	1,200 72.1 4.1	1,700 3.5
Alimentary	1,700 71.6 9.1	700 28.4 2.2	2,300 4.9
Speech impairment	0	200 100.0 0.6	200
Column total	18,300 3813	29,500 61.7	47,800 100.0

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981



AGE GROUP BY INTEREST IN A JOB AMONG THE UNEMPLOYED

Age Group	No	Yes	Total
15-24	407	4,217	4,624
	8.8	91.2	100
25-44	4,234	11,726	15,960
	26.4	73.6	100
45-64	12,878	13,036	25,914
	49.7	50.3	100

Source: Extended Data Analysis on the Handicapped Labour Force, May 1981

JOB TRAINING DESIRED AMONG THE UNEMPLOYED

Category		Number of Handicapped People	% of Applicable Handicapped Population
No		26,700	56.4 7.9
Yes		17,000	35.8
Missing		1,200	Missing
	Total:	44,900	100.0

Source: The Sociodemographic and Meed-Related Characteristics of the Physically Disabled in Ontario, Volume IV:
Data Analysis, July 1981.



TABLE 53

TYPE OF JOB TRAINING REQUIRED

Category	Number of Handicapped People	% of Applicable Handicapped Population
Manual Skills	11,900	64.4
Self-Help Skills	300	1.6
Social Skills	1,100	5.9
Job-Seeking Skills	1,400	7.6
None	900	4.9
Other	2,900	15.7
Total:	18,500	100.0

Source: Op cit



TABLE 54

REQUEST FOR FURTHER TRAINING BY AGE

AGE	NO	YES	ROW TOTAL
1 - 19	8,000	5,600	13,600
	58.8	41.2	3.2
	2.1	10.6	
20 - 39	32,800	16,200	49,000
	66.9	33.1	11.4
	8.7	30.7	
40 - 64	189,100	28,300	217,400
	87.0	13.0	50.8
	50.4	53.7	-
65 +	145,500	2,600	148,100
	98.2	1.8	34.6
	38.8	4.9	
Total:	375,400	52,700	428,100
	87.7	12.3	100.0

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.



TABLE 55

PRIMARY DISABILITY GROUP BY WANT FURTHER TRAINING

Primary Disability		Want Further Train	ning
Group	No	Yes	Row Total
Endo: Meta: Nutr.	21,600 29.1 5.7	1,800 7.9 3.5	23,400 5.5
Neurological	31,600 82.6 8.4	6,600 17.4 12.6	38,200
Cardiovascular	101,600 92.7 27.0	8,000 7.3 15.1	109,600 25.5
Respiratory	23,300 85.3 6.2	4,000 14.7 7.6	27,300 6.4
Neoplasm	11,000 96.2 2.9	400 3.8 0.8	11,400
Musculoskeletal	123,000 84.4 32.7	22,700 15.6 43.0	145,700 33.9
Sight Impairment	19,600 92.5 5.2	1,600 7.5 3.0	21 200 4.9
Hearing Impairment	29,400 87.5 7.8	4,200 12.5 8.0	33,600 7.8
Alimentary	14,700 82.6 3.9	3,100 17.4 5.9	17,800 4.2
Speech Impairment	600 69.1 0.1	200 30.9 0.5	800 0.2
Column Total:	376,400 87.7	52,700 12.3	429,100 100.0

Source: op cit



TABLE 56

REASON JOB TRAINING NOT WANTED

Reason	t.	Percentage
Tried - didn't he Don't know where Not available	elp	6.0 2.4 1.3
Can't get about No special reason Health problem	n	7.2 7.2 47.6
Other		28.3
Not Applicable		Missing
	Total:	100.0

Source: The Sociodemographic and Need Related
Characteristics of the Physically Handicapped
in Ontario, Volume IV: Data Analysis, July 1981

TABLE 57

EMPLOYMENT STATUS BY DESIRE FOR

Employment Status	No	Yes	Row Total
Employed	90,700 82.4 24.1	19,400 17.6 36.8	10,100 25.7
Unemployed	31,700 67.0 8.4	15,600 33.0 29.6	47,300 11.0
Other	25 4, 000 93.5 67.5	17,700 6.5 33.6	271,700 63.3
Column Total	376,400 87.7	52,700 12.3	429,100 100.0

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.



EMPLOYMENT STATUS BY TYPE OF FURTHER TRAINING DESIRED

TABLE 58

Type of	Employment Status			
Further Training	Employed	Unemployed	Other	Row Total
В. А.	600 27.1 3.0	0	1,700 72.9 9.1	. 2,300
B. Sc.	1,000 64.8 5.0	400 24.9 2.6	200 10.2 0.9	1,600
B. Comm.	300 60.9 1.6	200 39.1 1.4	0	500 1.0
B. Eng.	200 100.0 1.2	0	0	200
Other B.A.	300 43.2 1.7	0	500 56.8 2.5	800 1.5
M.A.	200 100.0 1.0	0	0	200
Other Masters	500 100.0 2.5	0	. 0	500
Law	300 100.0 1.4	0	0	300 0.5
Technical-Trade School	3,700 34.2 18.2	3,800 35.4 25.4	3,300 30.4 18.0	10,800 20.1
Science-Community College	2,000 51.6 9.7	700 19.3 4.9	1,100 29.1 6.1	3,800 7.1
Arts-Community College	3,600 27.7 17.7	4,900 38.2 32.9	4,400 34.1 24.1	12,900 24.1
Vocational Rehab.	1,000 43.5 4.9	600 24.4 3.7	700 32.1 4.0	2,300 4.3
Other Courses	6,500 37.5 32.0	4,300 25.2 29.0	6,400 37.3 35.3	17,300
Column Total:	20,200	15,000 28.0	18,200 34.1	53,400 100.0
Source: Op cit				

Source: Op cit



TABLE 59

### MAJOR NEED AREAS\* OF THE HANDICAPPED RANKED

		No. of Handicapped People with this Need	% of the Handicapped Population
1.	Day-to-day functioning	267,300	(58.6%)
2.	Recreational/social	252,400	(55.4%)
3.	Entry Into/Out of Bldgs.	191,300	(42.0%)
4.	Mobility in your community	140,900	(30.9%)
5.	Medical or rehab. treatment	146,300	(32.1%)
6.	Transportation Services	136,700	(30.0%)
7.	Income Security	128,700	(28.2%)
8.	Family relationships	119,200	(26.2%)
9.	Aids/devices or special equipmen	nt 101,900	(22.3%)
10.	Information about available services	97,200	(21.3%)
11.	Finding a job	87,800	(19.2%)
12.	Discrimination by the public	58,900	(12.9%)
13.	Accommodation or housing	46,800	(10.3%)
14.	Finding a job training program	41,600	( 9.1%)
15.	School or educational programs	40,400	( 8.8%)
16.	Social services (counselling, homemaker, day care, etc.)	35,100	(7.7%)
17.	Personal support care services i.e. nursing attendants	22,600	(5.0%)

Source: The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario, Volume IV, Data Analysis, July 1981.

<sup>\*</sup> This is a multiple response table.



TABLE 60

## EMPLOYMENT STATUS BY WHAT HELPED TO GET LAST JOB

What Helped	Employed
Own Skills	82,100 72.8
Positive Employer Attitude	5,500 4.9
Placement Agency	1,300 1.1
Social/Government Organization	2,400 2.1
Volunteer Assistance	11,000
Other	10,400
Column Total	112,700

Source: Preliminary Report on the Unemployed Handicapped Population in Ontario, April 1981.



TABLE 61

# ASKED TO LEAVE A JOB AND IMPAIRMENT CLASSIFICATION

	NO	YES	ROW TOTAL
ENDO: META: NUTR.	5,800 94.0 5.7	400 6.0 4.1	6,200 5.5
NEUROLOGICAL	10,700 84.1 10.4	2,000 15.9 22.2	12,700
CARDIOVASCULAR	22,700 93.4 22.2	1,600 6.6 17.7	24,300 21.8
RESPIRATORY	5,200 98.5 5.1	100 1.5 0.9	5,300 4.7
NEOPLASM	1,300 100.0 1.2	0	1,300
MUSCULOSKELETAL	42,900 93.4 41.9	3,000 6.5 33.6	45,900
SIGHT IMPAIRMENT	2,600 86.5 2.5	400 13.5 4.5	3,000 2.7
HEARING IMPAIRMENT	6,600 84.0 6.4	1,300 16.0 13.9	7,900 7.0
ALIMENTARY	4,700 94.4 4.6	300 5.6 3.1	5,000
COLUMN	102,500	9,100	111,500
TOTAL	91.9	8.1 .	100.0

Source: The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario, Volume IV: Data Analysis, July 1981.



TABLE 62

ESTIMATED GROWTH IN THE PROVINCIAL DISABLED POPULATION

Year	Provincial Population	Disabled Population	% Increase In Population	% of Provincia Population
1979-80*	8,501,000	456,000	NA	5.4
1986 +	9,173,190	595,597	NA .	6.5
1991	9,536,287	647,923	22.7	6.8
1996+	9,814,218	699,995	33.0	7.1
2001	9,788,022	747,153	41.5 ++	7.6

- \* Unadjusted
- + Projected (from adjusted figures)
- ++ Reported projected rate of increase (See: (2) below)

Source:	(1)	Unadjusted Data:	The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario, Volume 1, Executive Summary.
	(2)	Projected Data:	Derived from A Forecast Of The Impaired Population of Optario 1980-2001, August

of Health.

1980. Prepared for the Ontario Ministry



TABLE 63

# ESTIMATED GROWTH IN THE DISABLED LABOUR FORCE

Year	Handicapped Population	Working Age Pop. (20-64 yrs)	Handicapped Labour Force	Participatio Rate
		(L.F.P.R.)		
1979-80*	456,000	257,971 (56.6)	160,544 .	62.2
1986+	<b>59</b> 5,597	313,720 (52.7)	195,134	19
1991+	647,923	331,155 (51.1)	205,978	77
1996+	699,995	353,430 (50.5)	219,834	11
2001+	747,153	368,170 (49.3)	229,002	11

### \* Unadjusted

+ Derived from projections. The figures presented in this table reflect the increasing percentage of disabled persons over retirement age. It should also be noted that a constant participation rate of 62.2% has been assumed. The reported size of the handicapped labour may be expected to increase if (i) 15-19 year olds were to be included; (ii) participation rates were to increase.

Source: op cit



TABLE 64

EMPLOYMENT STATUS BY NEED FOR SPECIAL TRAINING

Employment	Need For Special Training			
Status	No	Yes	Total	
Employed	104,800 93.1 25.2	7,800 6.9 38.9	112,600 25.8	
Unemployed	42,000 88.3 10.1	5,600 11.7 27.8	47,600 10.9	
Other	269,500 97.6 64.7	6,700 2.4 33.3	276,100 63.3	
Column Total	416,300 95.4	20,000	436,200	

Source: Preliminary Report on the Umemployed Handicapped Population in Ontario, April 1981.



### BIBLIOGRAPHY - PUBLICATIONS

Architectural and Transportation Barriers Compliance Board, About Barriers, Architectural and Transportation Barriers Compliance Board, Washington.

Berkowitz, Edward D., <u>Disability Policies and Government Programs</u>, Prager Publishers, New York, New York, 1979.

Boyce, B. A. A Study of the Vocational Adequacy of Former Special Education Students Following High School Graduation, California State Department of Education, 1978.

Brawn, Joan C., A Hit and Miss Affair: Policies for Disabled People in Canada, Canadian Council on Social Development, Ottawa, 1977.

California Governor's Committee for Employment of the Handicapped, "Du Pont Article", Reprinted by California Governor's Committee for Employment of the Handicapped, May 1974.

Compensation Institute <u>Handbook of Job Evaluation Design</u> Pacific Palisades, California, 1980.

Dudek, R. A. <u>Human Rehabilitation Techniques</u>, a <u>Technology Assessment</u> (Parts A, B) Texas Technical University, 1977.

Finkelstein, Victor, Attitudes and Disabled People: Issue for Discussion, Monograph Number Five, World Rehabilitation Fund, Inc., New York, New York, 1980.

Gale, Margaret A., Peter R. Dahl, Paul F. Cook, <u>Vocational</u>
Opportunities: <u>Vocational Training and Placement of the Severely</u>
Handicapped, The American Institute for Research in the Behavioral
Sciences, Olympus Publishing Company, Sault Lake City, 1979.

Gurstein, M. <u>Telidon/Videotex and Special Needs Groups</u> Canadian Videotex Consultative Committee, Ottawa, 1981.

International Labour Office Adaptation of Jobs for the Disabled, Geneva, 1973.

La Rocca, J. The Application of Technological Developments to Physically Disabled People. Washington D.C., 1978.

McLaurin, J. W. Employability Restoration Engineering Program for the Severely Handicapped, Southwest Research Institute, San Antonio, Texas, 1977.

Noble, J. H. Rehabilitating the Severely Disabled: The Foreign Experience, U. S. Department of Health, Education and Welfare, 1978.

Office of Human Development <u>Technology and the Handicapped:</u> <u>Telecommunication Services in the Rehabilitation of the Blind</u>, Washington, 1977.

Smith, D. C. The Dual Labour Market Theory: A Canadian Perspective, Industrial Relations Centre, Queen's University, 1976.

Taylor, J. C. Fragmented Office Jobs and the Computer, Institute of Industrial Relations, University of California, 1979.

The President's Committee on Employment of the Disabed, A Survey of State Laws To Remove Barriers, Washington, D. C., August, 1973.



University of the State of New York, <u>Services for the Handicapped:</u> Linking Special Education, Occupational Education and Vocational Rehabilitation, Albany N. Y., 1979.

Van Horn, D. <u>Innovative Approaches to Employment of Blind Persons</u> through the Application of Sensory Aids Technology Proceedings: Human Factors Society meeting 1980.



### Journal/Periodical Articles

- Asher, Janet and Jules Asher, "How to Accommodate Workers in Wheelchairs," <u>Job Safety and Health</u>, V. 10, (4) 1976, pp. 30-35.
- Atelsek, F. How to make Job Banks work for the Handicapped, Human Needs, Oct.-Nov. 1972, pp. 17-19.
- Bischoff, P. Disabled Students/Able Workers, <u>Journal of College</u>
  Placement Summer 1978, pp. 63-66.
- Bolderson, Helen, "The Origins of the Disabled Persons Employment Quota and its Symbolic Significance, "Journal of Social Policy, V. 9 (2) April 1980, pp. 169-186.
- Bowe, Frank, "Looking Beyond the Disabilities." Worklife, May 1977, pp. 13-24.
- Clutterbuck, D. Helping the Disabled pay their way, <u>International</u>
  <u>Management</u> V. 30 (6) 1975, pp. 34-42.
- Dolnick, M. How the Disabled Break into the Economy, <u>Human Needs</u>
  Jan. 1973 pp. 29-31.
- Dyer, Fredrick, C., "Training the Handicapped: Now it's their turn for Affirmative Action," Personnel Journal V. 55 (4) 1976, pp. 181-183.
- Dymmel, M. D. Technology in Telecommunications: its effect on labour and skills. Monthly Labour Review, V. 102 (1), 1979.
- Ellwood, P. The Rehabilitation Industrial Complex, <u>Journal of</u> Rehabilitation V. 35 (2) 1969, pp. 18-21.
- Fieldstein, M. The Economics of the New Unemployment, <u>Public</u> <u>Interest</u> V. 33 Fall 1973, pp. 3-42.
- Felgen, J. H. A New View Towards Part-Timers, Administrative Management V. 40 (7) July 1979, pp. 30-31, 37.
- Fraser, R. T. Rehabilitation Job Placement Research: A Trend Perspective, Rehabilitation Literature V. 39 (9)
  Sept. 1978 pp. 258-264.
- Freedman, S. The Rehabilitation Center's Responsibility: Pre-Preparation and Placement, The New Outlook for the Blind V. 64 (1) 1970, pp. 1-5.
- Grills, C. M. Uncapping Handicapped Persons via Micrographics,

  Bulletin of the American Society for Information Science,

  V. 5 (4), 1979, p. 16.
- Guest, David "Failing to See Past the Disabled Label," Personnel Management August, 1979, pp. 40-45.



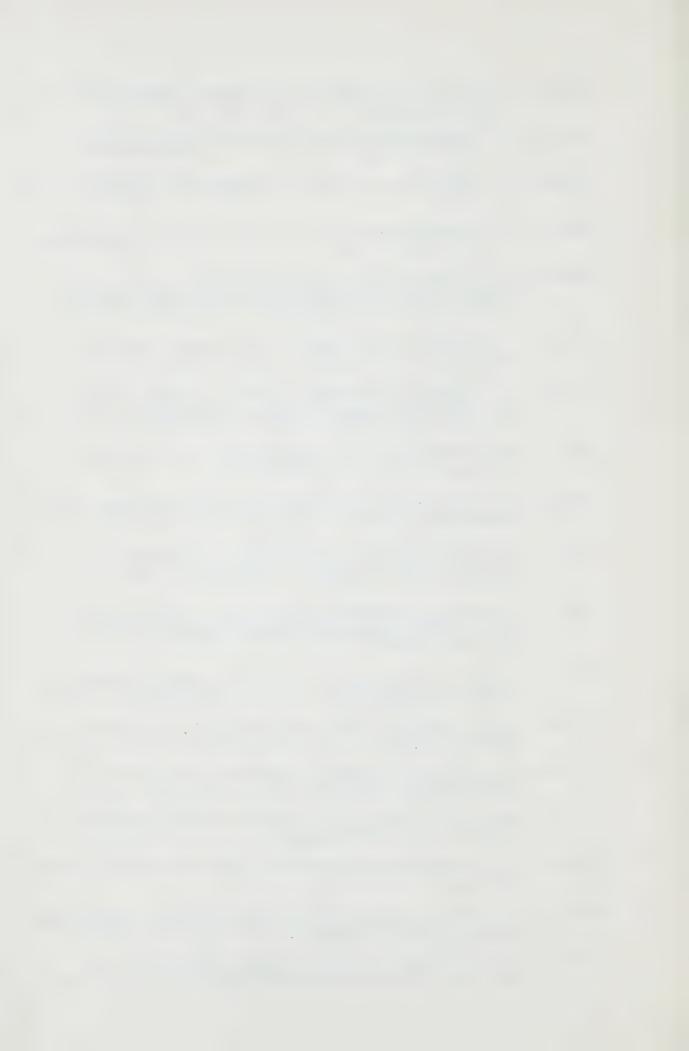
- Haber, L. Social Planning for Disability, <u>Journal of Human Resources</u> 1973, pp. 43-53.
- Hammond, N.C., New DP Consciousness: Considering the handicapped.

  Data Management, October 1978 pp. 31-32.
- Hines, John, "Overcoming Disabed", Personnel Management March, 1979, pp. 40-43.
- Holmes, Patty, "There are No Handicapped", Canadian Labour June 29, 1979, pp. 9-12.
- Howard, R., Brave New Workplace. Working Papers for a New Society VII (6) Nov.-Dec. 1980 p. 20-31.
- Hoye, P. In California Social Reform Starts at Home, <u>DCARA</u>, Oakland, California.
- Hunter, P. N. Coming Fact-to-Face With Rehabilitation, <u>Personnel</u> Journal V. 58 (1) Jan. 1979, pp. 41-44.
- Jackson, P. "Update on Handicapped Discrimination," Personnel Journal V. 57 (1) January, 1978, pp. 488-491.
- Jackson, R. Are We Realistic About Jobs? Special Education: Forward Trends V. 5 (1) March 1978, p. 11-13.
- Johnson, P. Hiring the Handicapped: Why more companies are beginning to look at it, Financial Times March 30, 1981, p. 30.
- Jones, M. A. A Valid Procedure for Testing the Physical Abilities of Job Applicants.
- Keith, R. D. Employment Seeking Preparation and Activity: An experimental job placement training model for rehabilitation clients, Rehabilitation Counselling Bulletin V. 2 (2), Dec. 1977, p. 159-165.
- Kelly, L. A. Preparing for the micro future. Worklife, Summer 1980, pp. 6-7.
- Kenway, A. "Overcoming Handicaps", Management Today March, 1979, pp. 54-56.
- Koch, J. Employing the Disadvantaged: Lessons from the past decade, California Management Review, V 17 (1), pp. 69-71.
- Krefting, L. A. The Impact of Applicant Ability on Evaluative Judgements in the Selection Process, Academy of Management V 19 (4), Dec. 1976, pp. 675-680.
- Kroger, W. "Disabled Workers Are No Handicap to Business, <u>Nation's</u> Business May, 1979, pp. 110-114.
- Lacy, D. P. EEO Impli-ations of job analysis, Employee Relations
  Law Journal V 4 (4) Spring 1979, pp. 525-534.
- Levitan, S. A. "Employment Problems of Disabled Persons".

  <u>Monthly Labour Review</u>, V 100 (3) 1977 p. 8 -
- Linthicum, S. Technical Training for the Severely Disabled:
  A Model Rehabilitation Literature V 38 (11-12) 1977 pp. 373-375.



- Mallier, A. T. Part-time Workers and the Economy, <u>International</u> Journal of Manpower V 1 (2) 1970, pp. 2-7.
- Mason, M. J. Software Opens Up Jobs for Blind, Minicomputer News V 5 (8) 1977, p. 18.
- Marshall, P. "Blind Workers: A Matter of Perspective", Manpower V. 6 (7), pp. 14-20.
- Marten, H. A. Physical Handicaps No Obstacle to DPers. Computerworld V 12 (44) 1978, p. 102.
- McMahon, B. T. A Model of Vocational Redevelopment for the Midcareer Physically Disabled, Rehabilitation Counselling Bulletin V 23 (1) Sept. 1977, pp. 35-47.
- McLeod, M. "Training the Handicapped in Saskatchewan", <u>Canadian</u>
  <u>Vocational</u> V 13 (2) August 2, 1977, pp. 26-28.
- Mellor, C. M. Technical Innovations in Braille, Reading, Writing and Production, <u>Visual Impairment and Blindness</u> V 73 (8) Oct. 1979, pp. 339-343.
- Milk, L. "But Can They Do The Job", <u>Human Rights</u>, V 9 (1) Spring 1980, pp. 16, 17, 49, 50.
- Minton, E. B. Job Placement" Strategies and Techniques, Rehabilitation Counselling Bulletin V 21 (2) Dec. 1977, pp. 141-9.
- Muir, M. Last to be hired, first to be fired the Physically Handicapped Worker in Canada, Physiotherapy Canada V 30 (3) May-June 1978, pp. 128-134.
- Nagi, S. Z. Disability Behaviour: Income Change and Motivation to Work, Industrial and Labour Relations Review V 25 (2), 1972, pp. 223-233.
- Nagi, S. Z. "Work, Employment and the Disabled", American Journal of Economics and Sociology V 31 (1) 1972, pp. 21-34.
- Nathanson, R. B. Integrating Disabled Employees into the Workplace, Personnel Journal, V 60 (2), Feb. 1981, pp. 109-13.
- Nathanson, B. "The Disabled Employee: Separating Myth From Fact," Harvard Business Review May-June 1977, pp. 9-11.
- Neil, S. Boes "Able-Disabled Battling Against Barriers", Worklife V 3 (10) October, 1978, pp. 8-11.
- Nesbitt, J. A. "Rehabilitating Employers", Parks and Recreation November 1977, pp. 36, 37, 56, 67.
- Norris, W. K. Manpower Aspects of Technological Progress. <u>International</u> Journal of Social Economics, v 2 (3) 1976, pp. 74-88.
- Oechslin, J. J. An Employer's Point of View: Enterprises and the Handicapped, International Labour Press Jan. 1981, pp. 8-10.



- O'Malley, M. Away From it All: How Computer Technology will let you get out of the office for good, pp. 60-66.
- Peach, L. A Realistic Approach to Employing the Disabled, Personnel Management V 13 (1) Jan. 1981, pp. 18-21.
- Pollock, H. "The Stay Program", Canadian Education V 18 (4) Winter, pp. 21-23.
- Rader, B. On Placement of Multiple Handicapped Clients into the Open Job Market, Rehabilitation Literature, V 39 (10) Oct. 1978, pp. 299-302.
- Rose, G. L. Effects of Handicap and Job Characteristics on Selection Evaluations, Personnel Phychology V 32 (2) Summer 1979, pp. 385-92.
- Rosenburg, J. The Relationship of Types of Post-High School Education to Occupation and Economic Independence of Physically Handicapped Adults, Rehabilitation Literature, V 38 (2), Feb. 1978, pp. 45-49.
- Rosher, J. H. Physically Disabled Students and Achievements
  Orientation: Self-Concept, Curriculum Track, and Career
  Aspirations, Journal of Vocational Behaviour, V 13, 1978,
  pp. 35-44.
- Ross, V. "Demanding Access For All", Maclean's V 94 (16), pp. 50-56.
- Ryan, S. G. Toward Computer Literacy for Visually Impaired Students, Visual Impairment and Blindness, V 72 (8) Oct. 1978, pp. 302-310.
- Salomone, P. R. Job Placement: New Tactics for Securing Job Leads,

  Relabilitation Counselling Bulletin, V 22 (4), April 1979,
  pp. 338-346.
- Schechter, E. S. Employment and Work Adjustments of the Disabled: 1972, Social Security Bulletin, V 40, pp. 2-15.
- Sloan, D. Jobs for the Disabled, Occupational Safety and Health, V 7, p. 49.
- Smith, E. I. The Employment and Functioning of the Homebound Disabled in Information Technology, The American Journal of Occupational Therapy V 27 (5) 1973, pp. 232-238.
- Sprungin, S. J. Competency Based Curriculum: A National Survey of Teachers, <u>Visual Impairment and Blindness</u> V 72 (5), May 1978, pp. 163-169.
- Stashower, G. Mainstreaming in the Work World, American Education V 12 (5) June 1976, pp. 9-13.
- Strassman, P. A. The Office of the Future: Information Management for the New Age. <u>Technology Review</u>, January 1980, p. 54-65.
- Tesolawski, D. G. Modifying Work Personalities of the Handicapped,

  The Vocational Guidance Quarterly, V 27 (4), June 1979,

  pp. 337-340.



- Thomas, T. H. Correlates and Consequences of Severe Disabilities,

  Journal of Occupational Medicine, V 16 (4) April 1974,

  pp. 234-244.
- Thornton, P. Managing the Manpower Aspects of Applying Microelectronics Technology. <u>International Journal of Manpower</u>, V 1 (1).
- Wadlow, E. "How DOL Helps Handicapped Workers", Worklife V 2 (5), pp. 7-12.
- Weidenbaum, M. L. Social Responsibility Is Closer Than You Think, <u>Michigan Business Review</u> V 25 (4), July 1973, pp. 32-35.
- Wilson, W. J. "The Disabled: An Underused Human Resource", Management Review V 63 (3) 1974, pp. 46-48.
- Wolfe, B. L. How the Disabled Fare in the Labour Market, Monthly Labour Review, V 103 (9), Sept. 1980, p. 48-52.
- Zadny, J. J. The Problem With Placement, Rehabilitation Counselling Bulletin, V 22 (5) June 1979, pp. 439-42.
- Rehahilitation Clients, Rehabilitation Counselling Bulletin V 22 (1) Sept. 1978, pp. 60-65.
- Beyond the Eighties. Worklife, Summer 1980, pp. 2-5.
- New Technology: The Impact on Employment. <u>European</u> Industrial Relations <u>Review</u> V 72, 1980, p. 25.
- Canada's Two Tier Social Security System, Employee Benefit Plan Review V 32 (2) August 1977, pp. 24-5.
- Job Opportunities for the Handicapped, American Federationist 1977, pp. 12-13.
- "De-Mything the Market Place", American Education V 13 (7), August/September 1977, pg. 4.

# Newspaper Articles

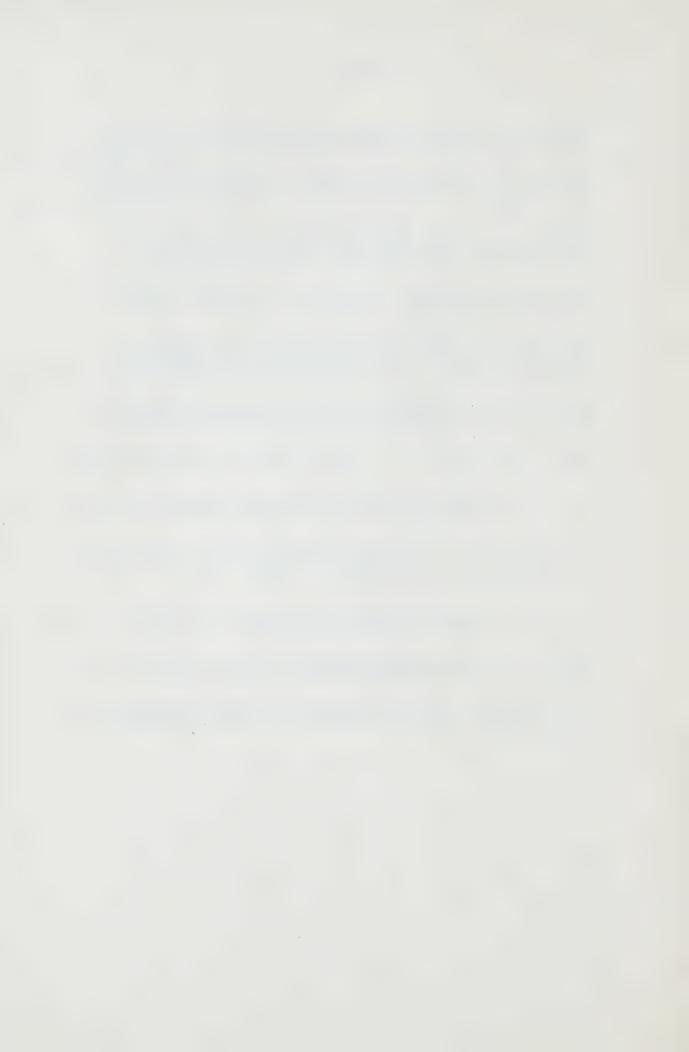
- Lipovenko, D. Computers Open New World to Disabled, The Globe and Mail Oct. 23, 1980, p. 4.
- Maloney, R. Hamilton Agency Links Jobs and Handicapped, <u>Ibid</u>. March 23, 1981, p. 30.
- Probe finds blind are 'poorest of the poor' Ibid.



### STUDIES

- Coughlin, R. Preliminary Report on the Unemployed Handicapped
  Population in Ontario. Prepared for the Ontario Manpower Commission, May 1981.
- Gilbert, J. W. Extended Data Analysis on the Handicapped Labour Force of Ontario. Prepared for the Ontario Manpower Commission, May 1981.
- Gilbert, J. W. et al. The Sociodemographic and Need Related Characteristics of the Physically Handicapped in Ontario.

  Prepared for the Ontario Ministry of Health, Toronto, August 1981.
- Health and Welfare Canada. The Health of Canadians: Report of the Canada Health Survey. Ottawa, June 1981.
- Jecchinis, C. A. The Impact of Microelectronics Technology on Employment: A Survey of Current Research Studies and Related Policies. Prepared for the Ontario Manpower Commission, Toronto, July 1980.
- McWhinnie, J. A Composite Picture of the Disabled in Canada. Health and Social Policy, Health and Welfare Canada, Ottawa, 1980.
- Ontario Manpower Commission, Youth Employment in Ontario 1980-1985, Toronto, June 1980.
- Imbalances Between Manpower Requirements and Supplies
  In Ontario: 1980-1985, Toronto, 1980.
- Public Health Service Vital and Health Statistics: Data from the the National Health Survey (Series 10: 126, 134, 125, 135, 111, 118), U. S. Department of HEW, Hyattsville, Maryland, 1977.
- State Estimates of Disability and Utilization of Medical Services: United States 1974-6. Ibid, 1978.
- Shanks, J. M. The California Disability Survey: Executive Summary, California Department of Rehabilitation, Berkeley, 1980.
- Social Security Administration, Work Disability in the United States, U. S. Department of, Health, Education and Welfare, Washington D.C., December 1980.



### (CANADIAN) GOVERNMENT PUBLICATIONS

### Federal

Canadian Human Rights Commission, Employ-Ability; a Resource Guide, Canadian Human Rights Commission, Ottawa, 1974.

Cohen, L. Summary of the American Experience with the Federal Contract Compliance Program. Prepared for Affirmative Action Division, Canada, Employment and Immigration Commission, Ottawa, December, 1979.

Complan Research Associates Ltd. The Affirmative Action Study.

Prepared for Affirmative Action Division, Canada Employment and
Immigration Commission, Ottawa, December, 1979.

Eastern Canada Consulting Services Ltd. Assessment of Impact of Insurance Coverage and Related Conditions As A Potential Barrier To Employment of the Physically Disabled. Prepared for Affirmative Action Division, Canada Employment and Immigration Commission, Ottawa, March, 1979.

Eberts, M. Mandatory Affirmative Action Legislation: A Proposal.

Prepared for Affirmative Action Division, Canada Employment and
Immigration Commission, Ottawa, December 1979.

Federal-Provincial Relations Office, Federal-Provincial Programs and Services; A Descriptive Inventory, Federal-Provincial Relations Office, Ottawa, 1978.

House of Commons, Minutes of Proceedings and Evidence of the Special Committee on the Disabled and the Handicapped, Ottawa, No. 21, May 25, 1981.

House of Commons, Obstacles: Report of the Special Committee on the Disabled and the Handicapped, Ottawa, February, 1981.

Kinsella, N. A Renewed Federal Contracts Program: An Instrument for Progressive Affirmative Action. Prepared for Affirmative Action Division, Canada Employment and Immigration Commission, Ottawa, November, 1979.

Kinsella, N. <u>Provincial Human Rights Legislation - Affirmative Action Program.</u> <u>Prepared</u> for Affirmative Action Division, Canada Employment and Immigration Commission, Ottawa, March 1980.

Klein, J. V.. Technological Change and Employment Opportunities for Disabled Persons Department of Manpower and Immigration, Ottawa, 1970.

Minister of Employment and Immigration Canada, News Release 81-17 Experimental Wage Subsidy Program.

- Pamphlets: (i) Hiring The Disabled: A Guide for Employers
  - (ii) Employment and the Disabled.

Rabeau, Y. <u>Tele-Informatics</u>, <u>Productivity and Employment: An Economic Interpretation</u> Department of Communications contract with GAMMA, Montreal 1980.



- Robertson, P. C. What Does Affirmative Action Really Mean? Prepared for Affirmative Action Division, Canada Employment and Immigration Commission, Ottawa, January 1979 (Transcript of Audio-Visual).
- Robertson, P. C. Affirmative Action What's It All About. Prepared for Affirmative Action Division, Canada Employment and Immigration Commission, Ottawa, March 1980.
- Smith, A. W. Affirmative Job Placement, Prepared for Affirmative Action Division, Canada Employment and Immigration Commission, Ottawa, March, 1980.



### ONTARIO

Board of Industrial Leadership, Building Ontario in the 1980's, Board of Industrial Leadership, Toronto, January, 1981.

Ontario Advisory Council on the Physically Handicapped, <u>Fifth Annual</u> Report, Toronto, March, 1980.

Ontario Manpower Commission, Comparative Statistics on Selected Handicapped Populations: Canada, California, the United States. Toronto, 1981.

Ontario Ministry of Labour, I Am More Than you See; A Guidebook for Employers on Hiring the Physically Handicapped, Ontario Ministry of Labour, 1978.

Ontario Ministry of Treasury and Economics, Office of the Budget and Intergovernmental Finance, Toronto, May, 1981.

Ontario Ministry of Treasury and Economics, <u>Public Accounts</u> 1979-80; Volume 1 - Financial Statements, Toronto, September, 1980.

Social Development Policy Field, Expenditure Estimates 1980-81. Vol. 4, Toronto, 1981.

Workmen's Compensation Board, Annual Report. Toronto, 1979.

#### OTHER

Alberta Department of Social Services and Community Health, <u>Evaluation</u> of the <u>Employment Skills Demonstration Program</u>, Edmonton, Alberta, <u>December</u>, 1980.

Saskatchewan Ministry of Health, Report of the Saskatchewan Task Force on Rehabilitation, Regina, December, 1980.











